DOCUMENT RESUME

ED 099 035 JC 740 476

AUTHOR Preising, Paul P., Ed.
TITLE Increasing Community College Student Motivation Through the Systematic Application of Commercially Produced Attitude Change Packages--The Field Test of Eight California Community Colleges.
INSTITUTION California Community Colleges, Sacramento. Office of the Chancellor.; San Jose City Coll., Calif.
PUB DATE Aug 74
NOTE 127p.

EDRS PRICE MF-$0.75 HC-$6.60 PLUS POSTAGE
DESCRIPTORS *Changing Attitudes; *College Students; *Community Colleges; Comparative Analysis; Grade Point Average; Hypothesis Testing; Post Secondary Education; Research Design; Retention; *Student Attitudes; *Student Motivation; Technical Reports; Video Tape Recordings
IDENTIFIERS *California

ABSTRACT

The purpose of this study was to seek conclusive data for answering the following research question: To what extent can the attitudes of community colleges students be improved through the systematic application of commercially produced attitude change packages? Eight California community colleges conducted an experiment using a variety of commercially produced tapes. As far as possible, each college conducted its experiment using an experimental/control group design. Each tried to test the following hypothesis: The GPA and retention rates of the experimental group (those given the attitude change packages) will be significantly higher as compared with a comparable control group. Selected findings of the study are: (1) some colleges reported positive results, whereas others failed to substantiate the hypothesis; (2) an unanticipated result was the clear support of the efficacy of some type of tutoring for improving college student achievement; and (3) all participating colleges supported continued experimentation and use of commercially produced tapes in efforts to improve attitudes of community college students. Recommendations include the following: (1) commercially produced attitude change packages should be refined and/or modified to make them more relevant to the community college student; and (2) the cooperation between the participating colleges and the Chancellor's Office of the California Community Colleges should be continued. (Author/DB)

ED 099035

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

INCREASING COMMUNITY COLLEGE STUDENT MOTIVATION THROUGH THE SYSTEMATIC APPLICATION OF COMMERCIALLY PRODUCED ATTITUDE CHANGE PACKAGES - THE FIELD TEST OF EIGHT CALIFORNIA COMMUNITY COLLEGES

PRESENTED TO THE CHANCELLOR
CALIFORNIA COMMUNITY COLLEGES
825 Fifteenth Street
Sacramento, California 95814

PAUL P. PREISING, ED. D., EDITOR AND PROJECT DIRECTOR
SAN JOSE CITY COLLEGE
SAN JOSE, CALIFORNIA 95128
AUGUST, 1974

JK 7.40.476

BEST COPY AVAILABLE

TABLE OF CONTENTS

	PAGE
CHAPTER #1	
INSTRODUCTION	4
RESEARCH PROBLEM AND HISTORY OF PROJECT	8
HYPOTHESES	10
PROCEDURES	11
CHAPTER #2	
REPORT OF MOUNT SAN ANTONIO COLLEGE BY: Francine Medeiros and John D. Reck	12
CHAPTER #3	
REPORT OF SANTA BARBARA CITY COLLEGE BY: Raymond G. Rosales	22
CHAPTER #4	
REPORT OF SAN FRANCISCO CITY COLLEGE BY: E. Lance Rogers	37
CHAPTER #5	
REPORT OF REEDLEY COLLEGE BY: Robert M. Clark	47
CHAPTER #6	
REPORT OF EL CAMINO COLLEGE BY: Lorene F. Brown	52
CHAPTER #7	
REPORT OF AMERICAN RIVER COLLEGE BY: Lorine A. Aughinbaugh	73
CHAPTER #8	
REPORT OF SHASTA COLLEGE BY: Walter Brooks and Susan Mosby	99
CHAPTER #9	
REPORT OF SAN JOSE CITY COLLEGE BY: Paul P. Preising	104
CHAPTER #10	
KEY FINDINGS OF FIELD TEST - SUMMARY AND DISCUSSION	111
RECOMMENDATIONS FOR ACTION	114
APPENDIX A	119

BEST COPY AVAILABLE

PREFACE AND ACKNOWLEDGEMENTS

The purpose of this monograph is to present decisionmakers at both the college and state level with data and recommendations bearing upon ways for improving the attitudes of community college students. Our hope is that this monograph will provide evidence which can be used by community colleges to experiment and work with their students in an effort to systematically bring about improvements in student attitudes and motivation.

The monograph has been written to facilitate quick as well as detailed review. For the reader who wishes to skip the details, the summarized findings and recommendations for action are presented in the final chapters. Each participating college's report is presented in chapter form for detailed review.

This monograph represents a serious effort of California institutional researchers to begin with an idea, pilot test, and finally, fieldtest before implementing a change in practice and curriculum. The hoped for results - an overwhelming endorsement of commercially produced attitude change packages did not materialize. However, each of the researchers reported what they did and what resulted in as rigorous a way as is possible when conducting institutional research in the community college setting.

Many people played a part in making this monograph possible. Mr. Ralph E. Matthews, Dean of Student Personnel Services, Mr. Donald Richardson, Specialist in Student Personnel Services, and especially Mr. George Hall, Specialist Student Personnel Services of the Chancellor's Office of the California Community

Colleges supported the project for funding and provided guidance in carrying it out.

I have received much stimulating discussion from my colleagues at each of the community colleges that follow:

American River College, Mrs. Lorine Aughinbaugh, Assistant Dean of Research; East Los Angeles College, Mr. Raymond Mireles, Director of EOPS, and Mr. Kevin Galvin, Coordinator of Research; El Camino College, Dr. Gerald Garlock, Coordinator of Research and Development, and Mr. Gene Kastiens, Coordinator of the Learning Center; Mount San Antonio College, Ms. Francine Medeiros, Instructor, and Mr. John Reck, Coordinator of Educational Development; Reedley College, Mr. Robert Clark, Counselor; San Francisco City College, Dr. Lance Rogers, Instructor; San Jose City College, Dr. Theodore Murguia, President, Dr. Otto Roemmich, Superintendent, and Dr. Allen Repashy, formerly Dean of Instruction and currently President of San Diego City College; Santa Barbara Community College, Mr. Raymond Rosales, Counselor and Mr. Al Silvera, Administrative Dean, Student Services; Shasta College, Mr. Walter Brooks, Vice President for Student Affairs; and, finally, Mr. Roger Bailey, Counselor, Southwestern College. To all these persons, named and unnamed, I would like to express my thanks.

Paul P. Preising

San Jose, California
August, 1974

CHAPTER #1

IMPROVING COMMUNITY COLLEGE STUDENT MOTIVATION THROUGH THE SYSTEMATIC APPLICATION OF COMMERCIALLY PRODUCED ATTITUDE CHANGE PACKAGES THE FIELDTEST RESULTS OF - CALIFORNIA COMMUNITY COLLEGES

INTRODUCTION

Charles McIntyre in 1972 wrote an article for the California Coordinating Council and clearly delineated the significance of the effects of motivational barriers on low income, minority community college students. McIntyre wrote:

> The desire to achieve, in comparison with other human drives, appears to be the most environmentally influenced. The image a person has of himself as an achiever greatly influences his willingness and ability to achieve. To a large extent this image is the result of miriad experiences each person has as he confronts his own physical, social, and psychological environment. In part it is an extension of "Nothing succeeds like success." To a large extent the development of a perception of himself as an achiever is the result of the many successful and unsuccessful experiences an individual has accumulated in his life role.
>
> Among the specific environmental factors that appear to have the most influence in the desire to achieve of the disadvantaged student are his family, his peer group, and his previous experience in similar confrontations. Motivation becomes something greater than desire to try or willingness to attempt higher education. It includes the selfconfidence that breeds aggressiveness and then the tenacity and drive to use one's energy to accomplish a goal or task. In this sense, the motivation must affect the alteration of behavior not only for initial trial, but for continued concentration. Clearly, achievement, drive, and motivation are among the most important prerequisites for the student who aims to enter and complete higher education. The lack of these constitute a serious barrier to increasing higher education opportunities.
>
> Foremost among the aspects of motivational barriers are those that relate to the self-attitudes, self-value, self-expectancy, and the general intellectual achievement motivation of the student.

If he perceives himself as one who is capable of achieving, he is much more likely in fact to achieve.

A second aspect of the motivational requirements are those that relate to the expectancy for achievement of the student developed by his family, his peer group, or his neighborhood. These environmental components appear to be mutually interrelated in developing the student's image of himself, but also in providing the social conditions in which the likelihood of his achievement is greater...

To my knowledge, no study is available that would give us a clue as to the extent numerically or proportionately that motivational barriers affect those among the disadvantaged who do not go on to higher education. However, the statements and judgment of many who live in the barrios ghettos indicate that this is a major barrier. The few exceptional ones who rise out of the barrios and ghettos also indicate that this motivational barrier has an extensive affect on the number of students who might otherwise be developing their intellectual resources in higher education and increasing utilization of an important reservoir of human resources in our state. The black students and students of Mexican descent state that action against this barrier requires major changes in the curriculum of the public schools and colleges.

An article by Donald E. Wood written in Whitefish, Montana for the Whitefish Pilot cogently makes the point that employers are still looking for employees who have more than technical skills. Wood wrote the following letter to a teenage boy who had applied for a job:

Dear Kid:

Today you asked me for a job. From the look of your shoulders as you walked out, I suspect you've been turned down before, and maybe you believe by now that kids out of high school can't find work.

But, I hired a teenager today. You saw him. He was the one with the polished shoes and a necktie. What was so special about him? Not experience: neither of you had any. It was his attitude that put him on the payroll instead of you. Attitude, son. A-T-T-I-T-U-D-E. He wanted that job badly enough to shuck the leather jacket, get a haircut, and look in the phone book to find out what this company makes. He did his best to impress me. That's where he edged you out.

You see, Kid, people who hire aren't "with" a lot of things. We know more about Bing than about Ringo, and we have some Stone-Age ideas about who owes whom a living. Maybe that makes us prehistoric, but there's nothing wrong with the checks we sign, and if you want one you'd better tune to our wave length.

Ever hear of "empathy"? It's the trick of seeing the other fellow's side of things. I couldn't have cared less that you're behind in your car payments. That's your problem and President Nixon's. What I needed was someone who'd go out in the plant, keep his eyes open, and work for me like he'd work for himself. If you have even the vaguest idea of what I'm trying to say, let it show the next time you ask for a job. You'll be head and shoulders above the rest.

Look, kid: The only time jobs grew on trees was while most of the manpower was wearing G.I.'s and pulling K.P. For all the rest of history you've had to get a job like you get a girl: "Case the situation, wear a clean shirt, and try to appear reasonably willing."

Maybe jobs aren't as plentiful right now, but a lot of us can remember when master craftsmen walked the streets. By comparison, you don't know the meaning of "scarce".

You may not believe it, but all around you employers are looking for young men smart enough to go after a job in the old-fashioned way. When they find one, they can't wait to unload some of their worries on him.

For both our sakes, get eager, will you?

Donald E. Wood

Each of the above articles in their own way dramatize the criticality and significance of motivation and attitude as they relate to college and/or job performance.

RESEARCH PROBLEM AND HISTORY OF PROJECT

What this project recognizes is that there is a considerable discrepancy between the actual college and/or job performance of low income minority students and the level required for effective performance at college and subsequently on the job.

Although the community college is ultimately concerned with its graduates on the job performance, it necessarily is concerned initially with their performance as students. The presumption is made that if community college experience is related to on the job performance, then the better the student performs in college, the better their expected performance on the job.

Concern for improving the learning of low income minority students at California Community Colleges has resulted in the State funding in 1968 of the Extended Opportunity Program Services, hereafter EOPS.

Under this program California Community Colleges have received funds to provide tutorial assistance, grants to low income students, peer counseling, and other specialized assistance. As this program has matured, selected colleges have concluded there is a crucial need to go beyond what they have done in the past and systematically address themselves to the improvement of student motivation and attitude. The concern they became involved with was how can students

not only be taught skills and knowledge, but also the will to achieve and attitudes for successful college and/or on the job performance.

One college, San Jose City, not wanting to "invent to wheel" conducted a search for commerically produced "attitude change packages." From the array of materials discovered they selected the "Lead the Field" series produced by Nightingale-Conant Corporation and pilot tested these tapes, first with unemployed aerospace engineers and later with low income minority students. The results of this pilot testing led to the decision to request funds from EOPS for more extensive testing at other California Community Colleges using other materials and testing procedures. Eight Community Colleges were selected to participate on the basis of their willingness to experiment and the presence on campus of a trained educational researcher. The colleges are:

1. Mount San Antonio College
2. Santa Barbara City College
3. San Francisco City College
4. Reedley College
5. El Camino College
6. American River College
7. Shasta College
8. San Jose City College

RESEARCH QUESTION

The research question each of the participating colleges above addressed themselves to was to what extent can the attitudes of low income minority students be improved through the systematic application of commerically produced attitude change packages?

RATIONALE, HYPOTHESES AND PROCEDURES

Each of the participating colleges based their belief that attitudes of low income community college students could be improved through the systematic application of commercially produced attitude change packages on the following paradigm: Performance = Ability x Motivation

Ability was viewed as relatively fixed whereas motivation was considered to vary from low to high. Therefore, to get an increase in performance, the most efficient approach decided upon was to increase motivation[1].

"Performance" was operationally defined for purposes of this study as significant improvement ($P.=<05$) of semester GPA and retention rate, although some of the colleges conducted additional measures. The hypotheses of this project follow.

HYPOTHESES

The general form of the hypotheses tested were as follows:

The GPA of the experimental group will be significantly higher ($P=<.05$) at the end of the semester as compared to a comparable control group; and,

1. This rationale is developed in greater detail by Paul P. Preising on page 104 of this report.

The retention rate of the experimental group will be significantly higher (P= .05) at the end of the semester as compared to a comparable control group.

PROCEDURES

Each of the participating community colleges used commercially produced attitude change tapes in one way or another. Each viewed the task of improving attitudes of community college students similarily, but used different expermental procedures.

For example, San Francisco City College took an eclectic approach to the use of attitude change packages and worked with Success Motivation as well as Nightingale Conant's, Lead the Field. Mount San Antonio used tapes, books (or Guides) and program specifically designed for Mexican American students by S. Raymond Mireles of East Los Angeles City College.

What each college did follows - one chapter of this report per college.*

*For the reader whose primary concern is with the summarization of findings and recommendations for action, see pages 114 - 118 of this report.

CHAPTER #2

SELF-ESTEEM AND ACADEMIC PERFORMANCE: USING A SELF-IMAGE IMPROVEMENT PACKAGE WITH EMPHASIS ON THE CHICANO STUDENT

BY: FRANCINE MEDEIROS AND JOHN D. RECK

Mt. San Antonio College, Walnut, California, June, 1974

Problem

During the last two years, Mr. Raymond Mireles, Director of USTED,[1] a Title III funded project at East Los Angeles City College, has developed a self-image development package especially geared to meet the educational and personal needs of the Chicano student. The same concerns which prompted the formulation of this approach--Self-Programmed Counseling and Self-Programmed Control (SPC)--led us to experiment with the package at Mt. San Antonio College in the fall of 1973. Briefly, these considerations can be summed up as follows:

1. How can the community college increase the enrollment of Chicano students to reflect the Kindergarten through Twelfth Grade (K-12) Spanish surname population of the district?

2. Having recruited more Chicano students, what can the institution do to retain them?

3. What types of programs/curricula should be developed to meet the learning styles as well as the personal and academic needs of the Chicano student?

By now, the validity of the above questions should be commonly recognized by all educators. Unfortunately, they are not--despite the fact that significantly higher "pushout"[2] rates for Chicano students and their lower enrollment percentages in institutions of higher learning

---

[1]United Students and Teachers for Educational Development

[2]The term "pushout" is used instead of the more familiar term of "dropout" to dramatize the belief that a major reason for the low retention rates of Chicano students is the insensitivity of the educational system, i.e., it does not meet their personal or academic needs. (cf. Mireles, Instructor's Guide, i).

are fairly standard information. In a 1970 study it was estimated that in parts of Texas over eighty-nine per cent leave school before their junior year. In parts of California the figure is fifty per cent.[3]

Closely allied with aforementioned educational statistics are occupational surveys that indicate Chicanos are overrepresented at the low end of the scale and underrepresented at the high end. Another part of this same study also reveals that the disadvantages of the Chicano increases as his educational level increases so that many tend to be overeducated compared to Anglos in similar positions. For example, twenty per cent of nonwhite males who are college graduates employed in the professional category are in secondary and elementary education, a relatively low wage classification. The corresponding figure for Anglos is nine per cent.[4] Evidence compiled in 1973 regarding the small number of Spanish surname teachers in the California educational system is additional testimony that the same type of inequality persists. Finally, the United States Commission on Civil Rights' recently published survey of Anglo teachers' attitudes towards Chicano students indicates that La Raza is still involved in an educational crisis.[5]

The above information points out a twofold problem: societal racism and the failure of the school system to adequately educate

---

[3] In [5].

[4] In [2].

[5] In [6].

BEST COPY AVAILABLE

Chicanos. But even such direct challenges do not fully illustrate the dilemma; for it is difficult to measure the consequences of insensitive teaching and resultant psychological damage. Over a period of years (K-12) barriers of language, time and place compound to negatively affect a student's self-image. These barriers are described by Mireles as links in a chain which must be broken if the counselee is to succeed. In other words, the concerns mentioned in the beginning of this paper--low enrollment percentages and poor retention--boil down to a more fundamental question: How can self-esteem be rebuilt so that an individual will be motivated to enroll in college and to develop the necessary skills for success?

The SPC Approach

The above rationale leads us to the following hypothesis: "The breaking of the chains of low self-esteem, language, time, and place limitations will enable institutions to provide a successful educational experience not only to barrio students, but to all students who enter the open door."[6] While several approaches have been developed to increase motivation by changing self-image, we have experimented only with the East Los Angeles City College package.

Self-Programmed Counseling is based on a series of response steps which help a student develop concentration and visualization by providing immediate feedback. In turn, this feedback enables the

[6] In [4].

student to more readily accept counsel. Self-Programmed Counseling, then, is the instructor's guidance and Self-Programmed Control is the student's response.

The SPC approach is based upon the established correlations between visualized behavior and the occurrence of the actual behavior. The underlying goal is to change negative behavior to positive behavior. In turn, this will improve the student's self-image. The inference is that an improved self-image will increase the chances of academic and general success.

The concentration-visualization process is the key to SPC. The program is based upon the following working hypothesis:

> Profound thinking (concentration) is associated with being knowledgeable; imagination (creating images) implies creativity. A student who develops and refines his faculties of concentration and visualization--and sees reassuring evidence of this--will develop a healthy self-image, and persevere. If he does not refine these abilities or does not know that he possesses them, he may be overwhelmed and drop out due to any number of factors ... . Since an academic setting compresses a multitude of experiences into our lives through symbols and concepts, it is essential that a student be provided the means to develop his ability to concentrate and visualize rapidly and effectively, at will.[7]

Materials and Procedures

The following materials were used to assist the students in the Mt. San Antonio College experimental class develop concentration

---

[7] In [4].

BEST COPY AVAILABLE

and visualization:

1. A cassette recorder/play-back unit.

   The student was taught a retrieval system so that all information on tapes was readily available. He was encouraged to record lectures as well as listen to a series of tapes which corresponded to reading material. The purpose of using the cassette is that it enables the student to study and learn whenever and wherever he wishes. Moreover, it is hoped that by taking the unit into the home the family will also learn and thereby become more supportive of the student.

2. Maltz, Maxwell. Psycho-Cybernetics. New York, 1960, 1973.

   This book, in conjunction with tapes, was intended to aid in the development of positive attitudes. It was the major source of the philosophy of self-image improvement.

3. Funk, Wilfred and Norman Lewis. Thirty Days To A More Powerful Vocabulary. New York, 1942, 1973.

   Wrenn, Gilbert and Robert Larsen. Studying Effectively. Stanford, 1941, 1972.

   (These two books were used to help the student gain actual academic skills necessary to succes in college).

RESEARCH METHODOLOGY

Hypotheses

In order to test the effectiveness of the SPC attitude change packet, a series of hypotheses were structured.

As compared to the control group:

1. The G.P.A. of the experimental group (those given the (SPC) will be significantly higher ($p \gtrsim .05$).

2. The rate of re-enrollment (Fall to Spring) of the experimental group will be significantly higher ($p \leq .05$).

3. At the conclusion of the fall semester, study habits of the experimental group as measured by the Brown-Holtzman Survey of Study Habits & Attitudes will be significantly higher ($p \leq .05$).

4. At the conclusion of the fall semester fear factors of the experimental group as measured by the Willoughby Personality Inventory will be significantly lower ($p \leq .05$).

5. At the beginning of the spring semester a significantly greater proportion ($p \leq .05$) of the students in the experimental group will carry a more increased course load as measured by the number of units attempted in the fall and spring semesters.

Population and Sampling

The population for this study included forty-six Chicano/Spanish surnamed students who enrolled in Fall Semester 1973 at Mt. San Antonio College and continued their enrollment through the fifteenth week of the semester. The experimental group of twenty-two students consisted of students who were enrolled in Scholastic & Personal Development 90 (an experimental course). The control group was randomly selected from four other regular courses (English 1A, English 68M. Politics of the Mexican-American 40, and History 1) with a known concentration of Chicano/Spanish surnamed students.

Comparability of the two groups was established by the similarity of School and College Aptitude Test (SCAT) composite scores. The mean score for the experimental group was 281 and 282 for the control group.

Statistical Treatment

The significance of mean differences (small samples) were tested by use of the following statistic:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n - 1)\ S_1^2 + (n_2 - 1)\ S_2^2}{n_1 - n_2 - 2}} \cdot \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

The significance of compared frequencies were tested by the used of the following statistic:

$$X^2 = \frac{N\ (ad - bc)^2}{(a + b)\ (c + d)\ \ (a + c)\ \ (b + d)}$$

Findings

The results of this study confirmed hypotheses 1 through 4. The students in the experimental group significantly achieved: (1) higher G.P.A.'s, (2) higher re-enrollment rate in the spring, (3) higher rated study habits and attitudes, (4) lower fear factor scores.

Hypothesis (5) was not confirmed. The students in the experimental group did not significantly increase the number of units carried at the beginning of the spring over the fall semester as compared with the control group.

The statistics for each of the five hypotheses are presented below:

H_1:

$\bar{X}_1$	$\bar{X}_2$	n_1	n_2	S_1	S_2	t
2.72	1.59	21	21	.8312	.7449	3.0016

(t with 40 d.f. is significant at $p < .005$)

H_2:

a	b	c	d	χ^2
21	18	1	24	16.7793

(χ^2 with 1 d.f. is significant at $p < .005$)

H_3:

$\bar{X}_1$	$\bar{X}_2$	n_1	n_2	S_1	S_2	t
241	150	22	24	37.148	53.197	21.0955

(t with 44 d.f. is significant at $p < .005$)

H_4:

$\bar{X}_1$	$\bar{X}_2$	n_1	n_2	S_1	S_2	t
18	33	22	24	16.217	10.723	21.8531

(t with 44 d.f. is significant at $p < .005$)

H_5:

a	b	c	d	χ^2
11	6	11	18	3.0791

(χ^2 with 1 d.f. is not significant at $p < .05$)

CONCLUSION

The results of the study at Mt. San Antonio College led the researchers to conclude that the SPC attitude change package can help Chicanos and other students to compete more effectively. As the findings illustrate, the SPC group achieved higher G.P.A.'s, higher Spring re-enrollment rates, better study habits and attitudes and lower fear factors. Although the experimental group did not significantly boost their unit load in the Spring, there was an increase. However, it is important to note that the average load of the SPC students was 10.4 units. A significant increase would have meant moving from part-time to full-time status, a decision affected by such outside considerations as home, family, and work.

The results also confirmed the researchers' impression that low self-image is a key factor inhibiting successful academic performance. Therefore, it behooves Mt. San Antonio College to continue experimentation with and development of attitude change packets like SPC. It would also be worthwhile for the faculty to incorporate the basic philosophy of SPC into their regular classroom procedures.

REFERENCES

1. Bare, Carole, "Personality and Self-Concept Correlates of Occupational Aspirations," Vocational Guidance Quarterly (June, 1970), 265-271.

2. Fogel, Walter, "The Effect of Low Educational Attainment and Discrimination on the Status of Minorities," The Education and Training of Racial Minorities, Proceedings of a conference by the University of Wisconsin, 1968, 121-144.

3. Lopez, Ron and Darryl Enos. Chicanos & Higher Public Education in California, California Legislative Assembly Joint Committee on Master Plan for Higher Education, 1972.

4. Mireles, Raymond. Self-Programmed Counseling and Self-Programmed Control: A Guide To Self-Image Development With Emphasis On The Chicano Student. (Instructor's Guide), Los Angeles: Cuatro Cadenas Press, 1973.

5. Reilley, Robert, "MMPI Scores of Mexican-American College Students," Journal of College Student Personnel (November, 1970), 419-422.

6. Sillas, Herman. Chicanos vs. The Educational Establishment. Report of the U.S. Commission of Civil Rights, 1973.

CHAPTER #3

INCREASING GPA AND STUDENT RETENTION THROUGH APPLICATION OF THE NIGHTINGALE-CONANT ATTITUDE CHANGE PACKAGES

BY: RAYMOND G. ROSALES
SANTA BARBARA CITY COLLEGE, JULY, 1974

STATEMENT OF PROBLEM

During the school years of 1971-72 and 1972-73, a number of meetings were held by a selected task force at Santa Barbara City College to determine how to aid educationally and economically disadvantaged students.

A constant concern based on previous meetings was the retention and attitude of these students in higher education. It was determined that recruitment and opportunity for personal and individual contacts with these students was quite adequate.

Once in college however, about half of the students were dropping out or having difficulties staying in school for a number of real and imagined reasons.

The task force was very concerned with the imagined reasons as most students simply felt that higher education was beyond their abilities and capabilities. Their attitude was that there was no value in higher education and since most had not done well in previous school work, it was obvious to them they would not do well in college. They seemed to have a self-fulfilling sense of failure.

These observations led to the hypothesis that a change of attitude towards themselves would provide the student a different set of values enabling them to stay in school and to maintain or improve their G.P.A.

These general conclusions led to the question as to whether educationally and economically disadvantaged students would have a higher retention rate and G.P.A. in college with a change of attitude.

A prior study by Paul Preising and Robert Frost relating to the use of attitudinal change packets to increase student retention had positive results and was a major basis for this project. We are indebted to Dr. Paul P. Preising of San Jose City College for his guidance and direction in this project. The study of the Nightengale-Conant attitude change package led to the belief it was convenient and applicable to use with a pilot program instituted at Santa Barbara City College in the Fall semester of 1973.

HYPOTHESIS

Based on the factors indicated above, would low income economically disadvantaged students have a significantly higher retention rate and G.P.A. if they receive the attitude change package compared to a control group that does not?

PROCEDURE

A college orientation class of twenty-one (21) students composed almost entirely of those from low income families, and who had a minimal achievement in previous school work, were chosen as a test group.

The class was chosen through the cooperation and assistance of Mr. Gerald Floyd, Mr. Frank Esparza, and Mr. Glenn Gaston, all counselors at Santa Barbara City College. They were the instructors and discussion leaders of the group. This class was chosen for convenience and control of the test group in which a regular programmed plan could be followed with a minimum of interruptions and a maximum of continuity.

These students were given all thirteen (13) tapes during one semester, one tape per week. Students were free to comment and discuss the presentations with the researcher - both before and after the presentation. An outline of what was on each tape and points to look for and discuss were put on the blackboard before each

presentation. All the discussions were lively and if permitted, would have continued for longer periods of time. This basic format was consistently followed throughout except for two different times when the tapes were not presented at the regular time because of other commitments. The class met every Tuesday at 12pm during the semester indicated and attendance was always excellent.

Another group of students was selected arbitrarily from the student population with as similar a background as the control group. There was no contact with the latter group other than research into their transcripts to determine their G.P.A. and progress.

Since the orientation class to whom the tapes were presented consisted of twenty-one (21) students, the control group also consisted of twenty-one (21) students.

FINDINGS

The fundamental conclusion of this study is that student retention rate in college is increased and there is a maintenance of G.P.A. with an improvement factor. It does appear there was a marked change in attitude and the tapes and discussions provided the test group with concrete, significant, and positive ideas to verbalize their motivation. (See Tables I, II, & III)

OBSERVATIONS

The writer's personal opinion and judgment based on the class interaction and individual meetings with students and staff is that;

1. Most of these students were unable to express in concrete terms, long range ideals and goals for themselves.

2. Most of these students do not know of their inability to communicate their rationale for staying in college.

3. Staff members and other students take it for granted that students in general know why they are in college and feel that student failure is simply a lack of interest or ability.

4. Students in the test group responded affirmatively and positively to the presentations and looked forward to class sessions.

5. Four students borrowed three tapes on their own time for their own use and two of them used four tapes to help other students.

6. Approximately eight students reacted negatively to portions of the tapes relating to business, corporations, nationalism, the use of examples of success that appeared to have no relationship to them as students, and to slogans and ideals they considered too materialistic.

IMPLICATIONS & GENERAL RECOMMENDATIONS

Although the findings indicate a positive correlation in improved retention rate and G.P.A. in college, the assumption must be made that the population measured in this study is too small to yet draw final determinations. This relates specifically to whether this particular attitude change package is the most effective.

A most important variable here is the person presenting the tapes and discussion. There has to be a firm belief and a very positive attitude by the presentor. There must be an open participatory relationship between the presentor(s) and recipients.

It is best if the presentor exercises no value judgments or opinions himself but serves as a moderator of student discussions.

With students such as the test group, it was sometimes difficult to hold their attention by simply listening to the tapes. If the tapes could be coordinated with graphic, pictorial illustrations, a better understanding and implementation of the message for motivation may have an even deeper meaning.

A further study or program of attitudinal change may be improved by a selection of six of the tapes in the Nightengale-Conant packet and a broader discussion of specific student related problems as they would apply to these six.

The six tapes recommended are;

1. The Mind of Man & Choosing Your Environment
2. The Magic of Attitude
3. Setting Worthy Goals
4. Personal Growth
5. Using Time Management
6. Using Your Mind

Since it is evident that students in any given group are of diverse background, the general and universal approach exemplified in the tapes was well received by most. It is also quite evident that a class or group of low income, low educational achievement personalities, will consist of a proportionate number of minority students. It would be of great help if some of the examples used and ideas discussed in the presentations related directly to minority achievements. The examples here should be of those individuals from poor families or educationally disadvantaged backgrounds who are successful in spite of difficulties similar to those in the motivation group.

Intereaction and discussions between the recipients of an attitudanal change program are of extreme value for comparisons and reinforcement of positive reactions. In the test group, and in a separate night class of veterans, the few who reacted negatively to some sections of the presentation, were responded to by the rest of the group in an affirmative manner.

The students in the test group who reacted most positively and enthusiastically were the students of Mexican parentage, or Mexican Americans. These were the students who requested the tapes after class and used them with other students. I caution against any recommendations here because of the limited number, and the fact that I myself am of Mexican parentage, which may have affected my relationship with the class. No ethnic implications are drawn for the rest of the students.

BEST COPY AVAILABLE

RECOMMENDATIONS - LOCAL

A complete set of the Nightengale-Conant "Lead the Field" tape packet has been purchased for Santa Barbara City College. It will be placed in our Learning Resources Center - Tutorial Lab.

It is requested that the materials be used selectively or in their entirety for Personal Development 2, Career Planning and Preparation classes taught by members of the counseling staff. All those who will teach these courses are familiar with the materials.

At the completion of the period in which these materials are used, questionaires should be distributed to evaluate reactions and to make recommendations.

A large number of Student Peer Counselors are well acquainted with the motivation program, as this writer views it, and they will be working with small groups of students and individuals in special tutoring sessions using the tapes.

A student will probably not benefit as much in listening to the tapes alone, as much of the value in the program is to interact and relate to others regarding the messages conveyed by the tapes. No one will be prohibited from listening to the tapes, as this would be better than not listening to them at all.

During the summer of 1975, it is recommended that the modified program be instituted, i.e. using the six selected tapes, for orientation sessions involving high school students planning on attending Santa Barbara City College. In particular, the E.O.P. and N.Y.C. students would be most likely candidates for a good study of the whole motivation and attitude change hypothesis.

A follow up and evaluation of this would be implemented to

observe long range results as well as any immediate changes that might take place.

At the end of the next school year a determination would be made to continue the program, modify it, or abandon it altogether.

RECOMMENDATIONS - STATE WIDE

The writer's recommendations are qualified, and qualified on the side of caution. Consequently, the interpretations and results of this study are not conclusive for a motivational program using the Nightengale-Conant tapes in their present form.

I personally believe very strongly in the approach I have used, based on Dr. Paul Preising's information and guidance.

The writer prefers a modified program, using only six (6) selected tapes, implemented in a number of institutions having no less than two hundred (200) minority students. In order to reduce the number of variables evident in such a study, A selected group in each institution is preferred over which close supervision were maintained. It is recommended that one half of the E.O.P. and/or N.Y.C. students be selected at the beginning of their college work as the experimental group. The other half of these students would be the control group.

All of the programs should begin and end at the same time of the year. All should have one evaluation form based on the same criteria for everyone.

The criteria to be measured should be factors in the variation of G.P.A. and drop out rates between the two selected groups at each institution. Since there may be a tendency to compare institutions, extreme caution should be exercised as there would be too many other variables not taken into consideration for this comparison to be valid.

All of the results should then be tabulated together into the two groups, i.e. the control groups and the experimental groups for a specific comparison between them overall.

This would furnish us with a large enough population to show validity from which some definite conclusions could be drawn.

It would be even more valid if the students selected in any sub group be as similar as possible in previous school work and within specific age ranges. This could encompass even other sub groups, such as those who were high school drop outs with no college experience. Another sub group that should be measured would be males and females with similar backgrounds to see if there are significant differences in motivation. It was noted in the study that all of the examples and ideals exemplified in the Nightengale-Conant materials were male oriented. This might make a difference in female or mixed groups. It may be necessary to modify this aspect of the materials to include some feminine view points. It is recommended this change be instituted. If it makes a difference we should be aware of it.

Another sub group recommended for state wide study, are the inmates of penal institutions. Many colleges, including Santa Barbara City College have programs in which inmates participate in classes either in jail or some kind of jail-release educational program.

Another recommendation is that all those participating be given some college credit on a credit-no credit basis. All classes should be structured for one teacher to meet at a specific time and place on a regular basis.

In conclusion, it is recommended that a further study be made as indicated above because of the writer's strong positive feelings for the motivation hypothesis.

The staff, students, and administration at Santa Barbara City College is most sincerely thanked for their consideration in making this study possible.

STUDENT MOTIVATION STUDY

Control Group

Spring GPA		Fall GPA
2.40	1.	2.77
1.91	2.	1.88
2.00	3.	W
2.23	4.	2.00
2.77	5.	3.00
2.50	6.	W
2.93	7.	2.86
2.92	8.	2.50
2.77	9.	2.77
3.17	10.	2.60
2.70	11.	2.57
1.75	12.	W
2.91	13.	2.67
3.40	14.	2.89
3.00	15.	W
2.25	16.	2.00
2.50	17.	W
3.30	18.	2.71
2.67	19	3.00
3.36	20	3.50
2.60	21.	1.60
$\overline{X}_C$ = 2.66	4.3534	$\overline{X}_{CF}$ = 2.58

W = Withdrew from school

STUDENT MOTIVATION STUDY

Test Group

Spring GPA		Fall GPA	
----	1.	3.56	
----	2.	3.00	
3.08	3.	3.25	
1.76	4.	2.00	
1.93	5.	2.29	
3.65	6.	3.60	
2.88	7.	2.38	
----	8.	2.71	
3.50	9.	2.75	Withdrew from class
2.79	10.	3.00	Withdrew from class
----	11.	2.50	
2.33	12.	2.67	
4.00	13.	3.25	
2.93	14.	3.00	
3.30	15.	3.05	
----	16.	3.39	
3.25	17.	4.00	
2.79	18.	W	
3.33	19.	3.67	
3.27	20.	3.82	
2.00	21.	3.08	

$\overline{X}_e$ = 2.92 $\overline{X}_{eF}$ = 3.06

W = Withdrew from school

---- = Did not complete any credits. No semester GPA.

TABLE I

Chi Square Test of Attrition Rates Between Experimental (TEST) and Control Groups.

	Experimental	Control	Total
Remained in School	20	16	34
Dropped	1	5	8
TOTAL	21	21	42

χ^2 = 1.75 with one degree of freedom. (Using Yates Correction For Small Sample)

Conclusion: The research hypothesis is rejected since ($P \leq .05$) was set as level of significance. However, it should be noted the results were significant at P = .20 and in the direction predicted.

TABLE II

Test for Significant Difference Between Experimental and Control Groups on GPA Before Start of Experiment.

Control	Experimental
$\bar{X}_c = 2.66$	$\bar{X}_E = 2.92$
$\Sigma x^2 = 4.3534$	$\Sigma x^2 = 6.1609$
$n = 21$	$n = 16$

$$s^2 = \left(\frac{\Sigma x_c^2 + x_e^2}{n_c + n_e - 2} \right) = \frac{4.35 + 6.16}{21 + 16 - 2} = \frac{10.51}{35} = .300$$

$$s_{\bar{X}_c + \bar{X}_e} = \sqrt{s^2 \left(\frac{n_c + n_e}{n_c \times n_e} \right)} = \sqrt{\frac{.30\ (21 + 16)}{336}} = .1840$$

$$t = \frac{\bar{X}_c - \bar{X}_e}{} = \frac{2.92 - 2.66}{.1840} = 1.41 \text{ is significant at } (P = .17) \text{ using a 2 tail test.}$$

Hence, the hypothesis that the groups do not differ significantly at the start is accepted. For purposes of this study the two groups did not differ on GPA, although it should be noted the control group mean GPA was lower as compared to the experimental group.

TABLE III

Test for Significant Difference Between the Experimental and Control Group GPA Following Experimentation.

Control		Experimental	
$\bar{X}$ =	2.58	$\bar{X}_2$ =	3.06
Σx^2 =	3.5010	Σx =	5.2318
n =	16	n =	18

(Same formula as above)

$$S^2 = \frac{5.2318 + 3.5010}{18 + 16 - 2} = .2729$$

$$S_{\bar{X}_c - \bar{X}_e} = \sqrt{.2729 \quad \frac{34==}{288}} = \sqrt{.0322} = .18$$

$$t = \frac{.48}{.18} = 2.66 \qquad \text{significant at } P < .01$$

Hence, the GPA of the experimental group was significantly higher as compared to the control group. One reason for this result is due to the slightly higher GPA of the experimental group at the start and the effort of the experitmental treatment. The hypothesis that the experimental group would out perform the control as measured by GPA is accepted.

CHAPTER #4

Attitudinal Change and the Tutee.

Dr. E. Lance Rogers
City College of San Francisco.

Success, both in personal affairs and the academic setting, is in large measure associated with the correct attitude. If a person has the "right" attitude, then the person will be well on the road to "success", however that may be defined. Because of this, since almost the inception of the Tutorial Program at City College of San Francisco, concerted attention and effort has been given to the attitude of the tutees and to improving their chances of academic success by improving their motivation. If the student, who has been or is academically unsuccessful, can be assisted to change his or her attitude -- begins to see himself or herself as a "success", as successfully completing current coursework, as developing an incrementally increasing grade point average, as moving progressively toward the goal he or she has set, as beginning to set both short and long term goals, and so forth -- then that person will probably be well on the way to success.

The writer was thus naturally interested and agreed to participate in the current project which is concerned with the change of attitude through a systematic application of attitude change packages.

Purpose.

The purpose of this article is to report upon the outcomes of a study designed to compare the efficacy of the Conant-Nightingale tapes with some other attitudinal change packages. Further the evaluative comments, made by the students who used the material, concerning all such material will be analyzed with a view to determining their expressed opinions of such materials.

Further this report will present the results of a descriptive study of the opinions expressed by a group of students who used the various attitudinal change packages and materials. The opinions expressed by these students will provide some insight into the limitations of the use of such materials and of some factors which should be carefully considered when such materials are to be used.

Experimental Design.

Students who avail themselves of the services of the Tutorial Center are routinely offered the use of attitudinal change material and/or packages, skill improvement material and/or packages, and, orientation material both to the services for students available on campus as well as through the Center. (The students who elect to receive help from the Tutorial Center will be called tutees while the students who either volunteer or are paid to help the tutees will be called peer tutors or simply tutors. A number of volunteers who are not students at the College, or, interested instructors who volunteer to help the tutees will also be included in the term tutors for purposes of this study.) When assigned to a tutor,

BEST COPY AVAILABLE

the tutee again is offered the use of the above material and packages, this time with the help of a peer tutor (tutor-counselor-advisor). Thus a student if offered the use of the attitudinal change material with or without the help of a tutor. Even if the student elects not to directly avail themselves of the attitudinal change material they will, where appropriate, be exposed to much of the same material while being helped by their tutor as the tutors have been through a training program a large part of which is concerned with attitudinal change. This then is the population which was studied: a group of students who had applied for tutorial assistance, and who either voluntarily or indirectly through the intervention of a tutor, or as a result of the screening program of the Tutorial Center, were found to be in need of assistance in the area of attitudinal change as an aid in the improvement of their scholastic ability.

Procedure.

Three groups of students were chosen from among the population described above. The first group of students was composed of tutees who had listened to at least 50 percent of the Conant-Nightingale tapes. This will be labeled Group I (C.N.). The second group chosen was composed of those tutees who had made use of the other motivational aid material available to the tutees but who had not used the Conant-Nightingale tapes. This group will be labeled Group II (other). The third group was composed of tutees who were tutored (as were all the students in the study) but who did not make use of the attitudinal change packages and/or materials as had Group I and Group II. This will be designated Group III (Control).

All tutees in Groups I, II, and III answered a comprehensive open-ended questionnaire designed to ascertain the amount of use they had made of which attitudinal change package and/or material,and, to inquire into their opinions concerning such material. For each student in the study the following data were collected: address and ZIP code, age, sex, semester in college, semester grade point average, cumulative grade point average, high school graduate or not, when and where a graduate from high school, SCAT score (reasoning, comprehension, quantitative), withdrew during semester or not, and number of hours of tutoring received.

Results.

Some of the results of the data collection are shown below:

	Group I (C.N.)	Group II (other)	Group III (control)
Number of persons in the group	20	21	29
Number of males	8	9	12
Percentage of males	40.0	42.8	41.4
Number of females	12	12	17
Percentage of females	60.0	57.2	58.6
Age of persons in the group (average)	19.3	19.5	23.8
Semester in college (average)	1.7	1.6	1.7
Percentage of high school graduates	70.0	66.7	65.5
Number of withdrawals	1	0	2
Percentage of withdrawals	5.0	0	6.9
Semester grade point average (average) (before treatment)	2.0	2.0	2.1
Semester grade point average (average) (after treatment)	2.7	2.8	2.8
Cumulative grade point average (average) (before treatment)	2.0	2.1	2.1
Cumulative grade point average (average) (after treatment)	2.5	2.6	2.6
Number of hours of peer tutoring-counseling and treatment received	40	39	40

From study of the raw data and the above statistics, it is clear that the three groups do not vary significantly with respect to the variables considered above. The SCAT scores were not available for all of the students but the data available showed no significant difference. When the ZIP codes of the addresses of the students were studied, it was found that 70.0 percent of Group I was from areas of the City which are generally considered to be Economic Opportunity Program target areas thus indicating that the students involved were likely to be monetarily disadvantaged. For Group II the percentage was 80.9 and for Group III the percentage was 82.8 while for all the groups together the figure was 78.6 percent.

The data show a significant rise in cumulative grade point average (0.5) for all groups after one semester of treatment (a semester of tutoring with or without the use of attitudinal change packages or materials) and an even greater rise in semester grade point average. The actual amount of increase in cumulative grade point average found in this study is considerably smaller than found in a continuing study done each semester by the author for all tutees -- a study wherein the increment is consistently about 0.9 grade points.

From the foregoing and careful study of the raw data, no significant differences can be detected between the three groups. For example, the data for age would tend to indicate that Group III is older, yet the raw data reveals this higher average value is due to two significantly older persons while the rest of the group of 29 are very similar to persons in Group I and II.

When the above data was combined with the opinions expressed by the students on the questionnaires it became clear that there was no significant defference between the three groups. This does not indicate that tapes are not effective but rather it does imply that they are one of a number of ways in which significant improvement in attitude can be effected. Similar concepts as emphasized on the tapes can be at least equally well introduced during discussion between tutor and tutee. Moreover there appears to be no significant difference between the results produced by the Conant-Nightingale tapes and the results from other motivational and attitude change packages and materials. Likewise analysis of the results does not give a clear-cut decision to either side in the tape vs no tape controversy. The well informed and conscientious tutor can and does significantly improve the attitude of a tutee.The results seem to strengthen the concept that education and especially the community colleges must offer an educational smorgasborg by which their multi-faceted clientele may be served, and these approaches can all meet with success.

Since in part the object of this series of research projects (of which this is but one) was to point to ways in which the educational opportunities of our clients may be improved, a synopsis of the individual opinions expressed by the seventy students in this project is significant and will now be offered.

Synopsis of the Student's Comments.

The language of the tapes was criticized by many of the students. They felt they had undue difficulty relating to the tapes because of the vocabulary used. Implied in some comments was the feeling that the gap in values, between those expressed in the tapes and their own, interfered with the learning process. The Conant-Nightingale tapes were also criticized because there were no female narrators.

Some respondents who had made some use of both the commercially prepared tapes and the locally prepared material tended to prefer the locally produced material if for no other reason that it was not commercially prepared -- a situation they regarded with suspicion.

Those students who were most advanced in their formal education and had the best grade point average appeared to claim greatest effectiveness for the tapes. A few critical comments were made concerning the "Anglo" point of view expressed in the tapes, and suggesting that a Spanish narrator would be preferable. However, comments by Spanish respondents were generally much more favorable than those from Black respondents. The Black respondents preferred not to use tapes but rather to rely on the services of a tutor. In this regard, one of the most consistent users of the Conant-Nightingale tapes as well as the other available tape packages was a Black tutor

who made her own mini tapes on various key ideas and then played them to her tutees. They were well received.

Several respondents made very complementary yet unsolicited comments about how they appreciated the Tutorial Center as it "put it all together" and helped them to attack many areas where they felt themselves deficient -- a reference to the "help for the whole person" concept which has been the guiding principle of the center since its inception. The students' comments reinforce the concept that tapes do have their place in the total offering of a personal growth center.

A frequent comment of the respondents who criticised the tapes for one reason or another was that they preferred to be helped by their tutor because he or she helped them to use in a more effective manner the services available to them on campus, mentioning the following by name: the Student Health Center, the Child Care Center, the Library, the Listening Laboratory, Financial Aids, and the Language Laboratory. It would seem that the college awareness section of the tutors' orientation course was well received and extensively utilized by the tutors in their dealings with their tutees.

Recommendations.

Attitudinal change packages should be employed to help community college students but should be viewed as one tool among many available to the educator. They are part of an incremental approach to the problem of helping the community college student. The students in this study preferred that attitudinal change packages be employed along with the services of a tutor rather than as a self study device. In fact the most favorable comments seemed to be made by the tutee when the tutor offered ideas for attitudinal change rather than these ideas coming directly from a tape. The existing attitude change packages which have been used in this research are of use but have limitations.

A need exists for an attitudinal change package specifically designed for use with the community college student. In the development of such a package attention should be given to the criticisms voiced by the tutees as outlined above. Particular attention should be given to the language employed by the narrators and the narrators should be of both sexes and varied racial background.

BEST COPY AVAILABLE

CHAPTER #5

TUTOR MOTIVATION

WILL MOTIVATION OF TUTORS WHO PARTICIPATED IN THE NIGHTINGALE CONANT TAPE PROGRAM HAVE A SIGNIFICANT EFFECT ON THE RETENTION RATE AND GPA OF THE STUDENTS THEY ARE TUTORING

BY: ROBERT M. CLARK
Reedley College, July 1, 1974

PURPOSE OF STUDY

In a 1971 study of Paul P. Preising and Robert Frost[1], it was found that the dropout rate of unemployed aerospace engineers given Nightingale-Conant attitude change packages and enrolled in computer science courses was significantly lower (P = .015) as compared to a comparable control group. In a 1973 study by Paul P. Preising[2] it was found that the GPA of the experimental group was significantly higher (P = .005) and the ratio of college retention of the experimental group was significantly higher (P = .01) as compared to a comparable control group. Preising, in his second study, suggested that one way to get to the zero motivated student is to first of all motivate his tutors by using the Nightingale-Conant tapes to motivate the motivators.[3] This suggestion gives rise to the question, "Will motivation of tutors who participated in the Nightingale-Conant tape program have a significant effect on the retention rate and GPA of the students they are tutoring?" The purpose of this study is to attempt to answer that question.

HYPOTHESES

The rationale for this type of study was firmly established by Preising in the previously cited studies. Given this rationale, this study will test each of the following hypotheses:

1. There will be no significant difference between the GPA's of the experimental group (those students whose tutors were given the Nightingale-Conant attitude change package) and the control group. (P = .05)

2. There will be no significant difference between the rate of college retention of the experimental group and the control group. (P = .05)

METHODOLOGY

At the beginning of the spring semester, 1974, a sum of

---

[1]Paul P Preising and Robert Frost, Increasing Student Retention Through Application of Attitude Change Packages, paper delivered to California Association for Institutional Research, May, 1972.

[2]Paul P. Preising, Increasing GPA and Student Retention of Low Income Minority Community College Students Through Application of Nightingale-Conant Change Packages - A Pilot Study, San Jose City College, 1973.

[3]Ibid.

BEST COPY AVAILABLE

money was budgeted to pay fifteen tutors to complete the Nightingale-Conant "Lead the Field" program. Thirty-four tutors were identified at the beginning of the semester, and fifteen were selected at random to participate. These fifteen agreed to the program. Well into the semester two tutors notified us that they wanted to drop the program without listening to any of the tapes, and one listened to the first five tapes and went no further. Therefore there were twelve tutors who completed the "Lead the Field" program, twenty-one tutors who did not participate in any part of the program, and one tutor who listened to only five tapes. This one tutor was excluded completely from the study. The tutors' selection and supervision was directed by Mr. Kenneth Zech, tutorial coordinator. The "Lead the Field" tapes were on reserve in the college learning laboratory and were checked out only to those tutors who were authorized to listen to them. A check-out card was signed upon completion of each tape. The tape usage was under the supervision of Mr. Jack Bredenberg, the learning laboratory supervisor. The tapes were used at one of the stations in the learning laboratory. The tape useage was on an individual basis, as indicated by the Nightingale-Conant program. There was no group discussion on tape content. The tape program was completed by all participating tutors by May 8, 1974.

At the end of the semester, semester grades were examined and statistical tests were applied.

RESULTS

Hypothesis one was tested by comparing tutored grade-point-averages (t test) and by comparing tutored grade-point-averages with overall semester grade-point-averages (chi square).

t Test for Tutored GPA

Experimental - GPA $\bar{X} = 1.606$, $N_E = 23$, $\Sigma X_E^2 = 46.3046$

Control - GPA $\bar{Y} = 1.470$, $N_C = 23$, $\Sigma X_C^2 = 41.4014$

$$S^2 = \left(\frac{\Sigma X_E^2 + \Sigma X_C^2}{N_E + N_C - 2}\right) = \frac{87.706}{44} = 1.99$$

$$S = \left(\bar{X}_E - \bar{Y}_C\right) = \sqrt{S^2\left(\frac{N_1 + N_2}{N_1 \times N_2}\right)} = \sqrt{\left(\frac{1.99}{1}\right)\left(\frac{23 + 23}{23 \times 23}\right)} = .415$$

$$t = \frac{\bar{X}_E - \bar{Y}_C}{S\left(\bar{X}_E - \bar{Y}_C\right)} = \frac{1.606 - 1.470}{.415} = .3277$$

BEST COPY AVAILABLE

Comparison of Tutored and Overall GPA
Spring Semester, 1974

	Experimental	Control	
Overall GPA	2.44	2.67	5.11
Tutored GPA	1.61	1.44	3.05
	4.05	4.11	8.16

$$\text{chi square} = \frac{8.16\left[(2.44)(1.44) - (2.67)(1.61)\right]^2}{(4.05)(4.11)(5.11)(3.05)} = .019$$

Since neither statistical analysis is significant at the .05 level of confidence, the null hypotheses is not rejected. Therefore there is no significant difference between the GPA's of the experimental and control groups.

Hypothesis two was tested by comparing overall retention in college, by comparing satisfactory completion (grade D or higher) of tutored courses, and by comparing satisfactory completion (grade D or higher) of all courses attempted.

Retention in College
Spring Semester, 1974

	Experimental	Control	
Completed semester	23	21	44
Withdrew from college	0	2	2
	23	23	46

$$\text{chi square} = \frac{46\left[(23)(2) - (21)(0)\right]^2}{(44)(2)(23)(23)} = 2.09$$

Tutored Courses Completed

	Experimental	Control	
Tutored courses completed	18	19	37
Tutored courses NOT completed	8	12	20
	26	31	57

$$\text{chi square} = \frac{57[(18)(12) - (19)(8)]^2}{(37)(20)(26)(31)} = \frac{233472}{596440} = .39$$

Overall Courses Completed

	Experimental	Control	
Courses attempted, completed	98	94	192
Courses attempted, NOT completed	38	38	76
	136	132	268

$$\text{chi square} = \frac{268[(98)(38) - (94)(38)]^2}{(136)(132)(192)(76)} = \frac{6191872}{261955584} = .02$$

Since none of the three tests show significant differences at the .05 level of confidence, the null hypothesis is not rejected. Therefore there are no significant differences in college retention between the experimental and control groups.

It should be pointed out that for purposes of this study, a W grade was considered 0 in determining tutored GPA. It should be noted that in all but overall GPA the tendency was in the right direction, but the difference was not significant.

RECOMMENDATIONS

Institutional - The value of using "Lead the Field" has been demonstrated as cited earlier in this report. Therefore it is recommended that the tape program be made available to interested individuals to be used in the learning laboratory. It is further recommended that the tape program also be made available in the Spanish language since Reedley College has a sizeable Spanish-speaking population in its service area. It is further recommended that formal use of the tape program be made in Guidance Studies classes and in Work Experience Seminars, to be used as a part of class-room presentation and discussion, with data analysis at the completion of each semester to determine effectiveness of such use.

State - One of the variables in a number of such studies done concurrently throughout the state was the methods used in applying the tapes. It is recommended that further study be undertaken to determine the most effective methods to be used in applying these tapes in an educational situation. It is further recommended that a cooperative effort be made with the publishers of "Lead the Field" to adapt the program content to a strictly educational situation.

CHAPTER #6

IAOCS RESEARCH PROJECT REPORT OF LEAD THE FIELD MOTIVATIONAL TAPES

BY: LORENE F. BROWN

EL CAMINO COLLEGE, AUGUST, 1974

I. EXPERIMENTAL DESIGN

All the students included in the IAOCS project on motivational tapes research were enrolled in Study Skills A classes at El Camino College during the fall and spring semesters of the 1973-74 academic school year. The researcher, Lorene F. Brown, an instructor for Educational Services and the Humanities Division, was assigned the four Study Skills A classes involved.

A. MATERIALS

The motivational tapes used with the experimental groups are a series entitled Lead the Field, consisting of thirteen short positive mental attitude lectures by Earl Nightingale. These tapes published by The Human Resources Company, average ten to fifteen minutes in length. The control groups were not introduced to the motivational tapes.

B. SELECTION

Fall: In the Fall of 1973, the experimental and control groups both met on Monday and Wednesday, the experimental group from 10-11:50 a.m. and the control group from 2-3:40 p.m. The researcher arbitrarily chose the morning class of Study Skills A, consisting of 17 students, to listen to Lead the Field tapes for a pilot study in preparation for the more systematic Spring

semester project. The afternoon Study Skills A class of 17 students thus served as the control group.

Spring: In the Spring of 1974, the researcher flipped a coin to determine the experimental group: again the Monday/Wednesday 10-11:50 class, with 18 students. The afternoon class of 25 students served as the control group. Only one student was involved in both semesters of research.

The only variable for both semesters was that when the students enrolled for Study Skills A, if both classes were open, they selected the time slot they preferred, morning or afternoon. Other than this variable, the classes were the same in all aspects: instructor, classroom setting, materials, class procedures, and short-term contracts.

C. PROCEDURE

Fall: The researcher randomly selected days for the experimental group to hear the motivational tapes and for both the experimental and control groups to complete questionnaires. The Fall experimental group heard five tapes, beginning in mid-November and ending January 9. This group received three questionnaires: two on days they had heard a tape (November 27 and December 13) and one on a day they had not heard a tape (December 11). The experimental students heard the tapes together via headsets and an induction system. There was no group discussion after any of the tapes.

Spring: The experimental students heard a tape each Monday at the beginning of the class period for four months; however, due to Monday holidays and other priorities, the students participated for ten Mondays rather than the expected sixteen. These students were given questionnaires at the end of their ninety minute classes the first weeks of March, April and May; plus they participated in personal

interviews the first week in June. The April questionnaire was given on a day the students had not heard a tape. As with the Fall experimental group, the Spring students heard the tapes via headsets and induction system. Occasionally and randomly, the experimental class met as a group after listening to the tapes; these discussions of five to fifteen minutes were to share thoughts/examples/questions stimulated by the tapes. After not being presented with any motivational tapes over two weeks, the members of the experimental group were interviewed individually the first week of June and given the following problem. The El Camino Learning Center has a limited budget for next year's new materials. The Lead the Field tapes are expensive (in fact, the series is overpriced) and would consume a sizable portion of the Learning Center budget if purchased. Would you recommend that the Learning Center purchase this set of tapes? Would they be worth a substantial part of the Learning Center budget?

D. TESTING

There was no pre-testing or post-testing on motivation for any of the groups involved in this research project, Fall or Spring.

II. OPERATIONAL DEFINITIONS

A. STUDY SKILLS A CLASS: This nontransferable class is designed to service high risk students whose low communication skills threaten their survival in academic courses. The instructor diagnoses each student's communication skills level via standardized and individual testing as well as with conferences. Then she guides the student in selecting appropriate individualized learning programs, arranges tutorial services, keeps aware of the student's problems in his other courses and provides emergency aid for these problems.

The class meets in a small classroom in the Learning Center twice a week for the first five or ten minutes to take roll, distribute folders,

share messages, obtain instructions, and handle any other class business. Students then take their folders, procure any software necessary, and relocate at will in the Learning Center to use the rest of the period studying individually. The instructor is available as a resource person and has constant contact with each student on both an informal, spontaneous basis as well as with more formal, arranged conferences.

Each student designs short term contracts of one to three weeks duration to include one or more chapters/units/lessons to study; both the student and instructor sign the contract; and at the end of each contract the student tests himself and shares his results with the instructor as a vehicle to determine the student's next step.

This is a credit/no credit class in which students can earn from one to three units depending on 1) their application to their individual programs, 2) their attendance, and 3) less importantly, their progress in their selected areas of study as reflected in each program's unit and post-test and the comparative results of the Purdue Test in English.

B. STUDY SKILLS A STUDENTS

The students in Study Skills A classes are qualified to enroll if they are Project Open Door (POD/EOP) students, Vocational Education Act-Disadvantaged (VEA) students, or, if the class has not met its maximum enrollment, other students can be admitted at the discretion of the instructor. However, each student must be enrolled in at least one academic course requiring communication skills. These students are mainly high risk/low motivated students and face academic failure unless they build up their low communication skills.

Table 1

DISTRIBUTION OF PERCENT OF TYPES OF STUDENTS FOR 1973-74

		POD/EOP	VEA	OTHERS
Fall	Experimental Group	41	41	18
	Control Group	71	6	23
Spring	Experimental Group	60	33	7
	Control Group	38	27	41

Table 2

DISTRIBUTION OF PERCENT OF RACES FOR 1973-74

		WHITE	BLACK	BROWN
Fall	Experimental Group	29	42	29
	Control Group	29	24	47
Spring	Experimental Group	12	44	44
	Control Group	28	40	32

III. PROCEDURE

1. Researcher Lorene F. Brown met with Gene Kerstiens, Coordinator of the El Camino Learning Center, and Dr. Paul Preising, IAOCS Project Director, in November of 1973 to discuss proposed research on Lead the Field motivational tapes. The researcher had heard several of the tapes previous to this meeting. She expressed doubt about how much time she could devote to post-tape discussion and felt tapes must be able to motivate without group reinforcement.
2. The researcher decided to run a pilot group for the remainder of the Fall semester to anticipate any difficulties and to test the workability of the questionnaires designed. She selected, arbitrarily, one of her two Study Skills A classes to listen to five motivational tapes, presented randomly, and asked the students to complete three questionnaires during the weeks involved.
3. The researcher designed and conducted a procedure for the Spring semester: beginning February 4, the experimental group heard a motivational tape each Monday morning for ten Mondays of the four months included in the research; half of the time the class had group discussion after the tape. The first weeks of March, April and May, students completed questionnaires, and the first week in June each student present in the experimental group was interviewed.
4. The researcher met with Dr. Jerry Garlock, the Coordinator of Research at El Camino College, to discuss the format of the final IAOCS research report to be presented to Dr. Preising by July 15, 1974. Dr. Garlock recommended the utilization of chi-squares to analyze the data.
5. The researcher formulated 39 chi-squares, which Dr. Garlock processed on the computer. The researcher then analyzed the computer data and drew up a first draft of the final report, which was then submitted to Mr. Kerstiens and Dr. Garlock for editorial suggestions.

6. The researcher submitted the final IAOCS report to Dr. Paul Preising; Dr. Hamilton Maddaford, Dean of Educational Services at El Camino College; Mr. Gene Kerstiens, and Dr. Jerry Garlock.

IV. HYPOTHESES

Hypothesis 1: There is no statistical significance in attrition rate between groups that listen to motivational tapes and those who do not listen.

Hypothesis 2: There is no statistical significance in GPA gains between groups that listen to motivational tapes and those who do not listen.

Hypothesis 3: There is no statistical significance in number of units granted between groups that listen to motivational tapes and those who do not listen.

Hypothesis 4: There is no statistical significance in daily work in the areas of interest in work, concentration, and actual work time between groups that listen to motivational tapes and those who do not.

V. RESULTS

A. LONG-TERM RESULTS

1. Attrition Rate

The fall drop-out statistics for the pilot study were not included because the tapes were used for such a short period of time at the end of the semester that there is little feasibility of a correlation between the use of motivational tapes and the attrition rate.

Table 3

DISTRIBUTION OF PERCENT OF SPRING ATTRITION RATE

		TOTAL SEMESTER COUNT N	FINAL COUNT N	DROP-OUT PERCENTAGE
Spring	Experimental Group	24	18	25
	Control Group	29	25	13

Conclusions of Attrition Rate:

There is no statistical justification that the motivational tapes affect the attrition rate inasmuch as the control group's attrition rate (13%) was lower than the experimental group's (25%). The listening to the motivational tapes was testified to be a positive experience by the experimental students. An inquiry into the reason for leaving the College indicate a variety of personal reasons independent of any college program. Examples of reasons for leaving included job transfers, pregnancy, and moving out of state.

2. GPA Gains

The GPA scores for each student were accumulated to find the mean difference and z ratios. These GPA scores are for the semester the students were in either the experimental or control groups and include all grades for courses with letter grades, whether the course is academic or non-academic. The GPA's do not include any credit/no credit courses. GPA data are presented in Table 4.

Conclusions of GPA Gains:

All three z ratios were not significant but each difference favored the experimental groups. Further research is needed to establish more definitive evidence with a larger sample to determine whether GPA gains would

Table 4
GPA
DIFFERENCES BETWEEN EXPERIMENTAL AND
CONTROL GROUPS FOR FALL, SPRING, AND BOTH SEMESTERS

	EXPERIMENTAL			CONTROL					
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Mean Difference	z	Sig.
Fall Only	16	2.49	.86	18	2.25	.77	.24	.83	N.S.
Spring Only	17	2.37	.69	21	2.27	.14	.10	.57	N.S.
Fall and Spring	33	2.43	.78	39	2.26	.53	.17	1.05	N.S.

be significant in a replication of the study.

3. Units Granted

Although the Study Skills A class is a credit/no credit class, a student's motivational behavior is usually reflected in the number of units granted since the two main factors are application to individual program and attendance. The following is a distribution of units granted to the Fall and Spring experimental and control groups.

Table 5

DISTRIBUTION OF PERCENT OF UNITS GRANTED

		N	3 UNITS	2 UNITS	1 UNIT	W
Fall	Experimental Group	17	76	6	6	12
	Control Group	17	94	6	-	-
Spring	Experimental Group	18	39	44	6	11
	Control Group	25	60	28	4	8

Conclusions of Units Granted:

There was no significant difference in number of units granted to the Fall experimental and control groups. In the Spring, the control group did significantly better: 60 percent of the control received three units of credit as compared to 39 percent of the experimental group receiving three units. Thus, the number of units granted does not statistically support the conjecture that the Lead the Field motivational tapes influence application and attendance.

4. Testimonials: Spring Experimental Group

During a private interview, each of the ten students present in the experimental group the first week in June, 1974, was asked whether he would recommend that the Learning Center purchase the series of Lead the Field tapes. Each student was made aware that the tapes would consume a considerable portion of the Learning Center's budget for the next year so a careful decision had to be made. All ten students unhesitatingly recommended the purchase of the motivational tapes despite their expense: in their opinions the tapes were well worth whatever the amount.

The following quotations reflect the three major areas discussed during each interview: student's first reaction when questioned about the effectiveness of the motivational tapes, student's estimate of how long the tapes were effective, and student's opinion of group discussions.

First Reaction:

Student 1: ". . . good because I often lack motivation."

Student 2: "I'm sold on them. I wanted to take them home for my family to hear but couldn't, so I had my daughter come to the Learning Center to hear them. They were very helpful."

Student 3: "They helped a lot. They gave me good ideas I hadn't thought about before."

Student 4: "I liked the one on attitude the most. It really gave me something to think about for a couple of weeks and I still think about it."

Student 5: "They really helped me."

Student 6: "They were no big thing; they gave me ideas but were no big inspiration."

Student 7: "They made me think about myself. I liked them."

Student 8: "They were helpful. I liked the suggestion of daily steps especially. I liked the tapes a lot."

Student 9: "They were very influential because they brought out obstacles I wasn't conscious of before. They broadened the picture and really encouraged persistence."

Student 10: "Some of the tapes helped me a little bit."

Length of Effect:

Three students stated the effect of the tapes lasted three hours, two students reported the effect lasted days, four students felt the effect lasted months, and one student felt the effects varied.

Comments:

---"I still refer back to the attitude tapes." (Student 2)

---"I still think about the tape that suggested making a daily list and stating that you can do what you want to do." (Student 3)

---"The effect lasted for two or three days. The speaker planted an idea and then you had to carry on." (Student 8)

---"The tapes still have an effect. . . they've helped keep me in school. If it hadn't been for Project Open Door and the tapes, I would have dropped out of school." (Student 9)

Group Effectiveness

Seven students stated that they felt group discussion after listening to the tapes was of definite benefit; two students reported the group discussions were of no benefit to them; and one student failed to respond to the question.

Comments:

---"I had better results when the group met." (Student 2)

---"I got other ideas from the group because other people had other interpretations." (Student 3)

---"Group discussion made the effect last longer." (Student 6)

---"Group helped to clear up anything I didn't understand about the tape." (Student 7)

---"It helped to know others in the group had the same problems." (Student 9)

Comments in general:

---"The tapes gave me a different way of looking at myself." (Student 1)

---"The tapes are good to use after a vacation and towards the end of the semester to motivate students." (Student 5)

---"I'd suggest more in-depth discussion and use them more often--perhaps daily." (Student 6)

Eight of the ten students interviewed suggested the tapes be used more often.

Conclusions of Testimonials:

Although the other long-range data concerning attrition rates, GPA gains, and units granted were not statistically significant, the testimonials given were logically significant. The wide variation between the statistical and testimonial data might suggest the conjecture that motivation cannot be measured statistically. The dichotomy also suggests that the motivational tapes planted ideas but did not cause the students to follow through by applying the ideas to their academic life. The fact that eight out of ten students suggested the tapes be used more often could imply they need more exposure to the tapes for the ideas to be activated.

B. Short-Term Results: Chi-Square Data

1. On days when the Fall and Spring experimental groups listened to motivational tapes, there was no significant difference in their daily work in interest in work, concentration, and actual work time from days when they did not listen to tapes. (See Appendix A: Chi Squares 1-6 and 19-24)

However, some of the chi-square results were encouraging; for example, in the fall experimental group, when ten students listened to a motivational tape and ten did not, the chi-square in concentration was 3.600 (Chi-Square 3).

2. When half the Fall experimental class listened to a motivational tape and the other half did not on the same day, there was no significant difference in work or actual work time, although the level of significance for concentration was .05 (Chi-Squares 7-9).
3. When the Fall and Spring experimental and control groups were compared for interest in work, concentration, and actual work time, there was no significant difference although one chi-square result of 2.13 in concentration is encouraging (Chi-Square 29).
4. When the Spring control group was compared with the Spring experimental group on a day the experimental group did not listen to a tape, there was no significant difference in interest in work, concentration, and actual work time (Chi-Squares 34-36). Thus, the experimental group showed no real gain whether or not they listened to a motivational tape.
5. When the Fall pilot experimental group was compared to the Spring research experimental group, there was no significant difference in interest in work, concentration, or actual work time (Chi-Squares 37-39). Thus, there was no significant difference between the pilot group that listened to five tapes and the experimental group that listened to ten tapes and participated in group discussions.
6. When the 39 chi-square comparisons were made, only one chi-square showed a level of significance of .05 (Chi-Square 8). However, there were some results that indicate some encouragement, especially in the areas of concentration (Chi-Squares 3, 4, 8, 14, and 29) and actual work time (24, 27, and 39).

Conclusions of Chi-Square Factors:

The results show that the chi-square statistics do not support the conjecture that Lead the Field motivational tapes influence students in the areas of interest in work, concentration, and actual work time during class; however, the results do not reject the conjecture either. The analyses of the chi-square factors do not indicate that this particular method of motivation was statistically better; possibly this method cannot be satisfactorily proven.

The researcher's personal observations substantiate the chi-square results. Although the students appeared interested in the motivational tape's concepts during the post-tape discussions, their behavior did not seem to be modified during the remaining class time. Those students who seemed dedicated to their individual programs continued to work diligently with or without the tapes; and those who appeared indifferent continued to be so, with or without the tapes, even though most of them participated enthusiastically in post-tape discussions.

VI. SUMMARY

Although the statistical data do not support the conjecture that motivational tapes will affect a student's academic life, enough of the results were in favor of the experimental groups to encourage continued research in this vital area. The long-term and short-term results as well as the researcher's observations conclude that the motivational tapes do plant ideas of positive attitude and action, but these ideas lie dormant instead of motivating the students to active results.

In other words, the motivational tapes are but a beginning; they must be supplemented with meaningful activities on the individual and group level that will cause each student to put into action a positive thinking idea that will affect his academic life. These activities should include pre-tape activities to prepare the students for the ideas, post-tape group discussion to share insights and problems, and then an individual activity to cause behavioral modification.

Since negative attitudes are deeply engrained, researchers must work with students more than one semester to expect positive results on academic life. Also, students should be reinforced with more than one type of motivational experience. Clearly, in one semester, by themselves, the Lead the Field motivational tapes cannot undo years of negative attitudes and poor motivation.

Research is needed, then, with more frequent use of motivational tapes correlated with meaningful activities, and supplemented with other motivational materials and experiences. Since a poorly motivated student is one programmed for failure, research in motivation should be on every college's priority list of research.

VII. RECOMMENDATIONS FOR ACTION

A. Recommendations for El Camino College are to utilize the Lead the Field motivational tapes more efficiently and effectively by:

1. introducing them to more students and instructors via the Learning Center, and
2. utilizing them in the Study Skills A classes either on an individual or class basis, using post-tape group discussion and individual follow-up activities.

B. Recommendations to Chancellor's Office are to:

1. continue study by comparing and contrasting the Lead the Field tapes with other motivational materials,
2. study which Lead the Field tapes are the most effective, and
3. study long range effects of students given exposure to Lead the Field tapes and other motivational materials for an extended period of time.

APPENDIX A

CHI-SQUARE ANALYSIS ON MOTIVATIONAL RESEARCH

Data #1

Fall Experimental

	Interest in Work			
	Low	Med.	High	Total
A: yes	2	2	6	10
B: no	2	3	5	10
Total	4	5	11	20

Chi-Square 0.291
Differences in the distributions are not significant.

Data #2

Fall Experimental

	Interest in Work			
	Low	Med.	High	Total
B: no	2	3	5	10
C: yes	3	6	4	13
Total	5	9	9	23

Chi-Square 0.936
Differences in the distributions are not significant.

Data #3

Fall Experimental

	Concentration			
	20-50 min.	60-70 min.	80-90 min.	Total
A: yes	2	7	1	10
B: no	3	3	4	10
Total	5	10	5	20

Chi-Square 3.600
Differences in the distributions are not significant.

Data #4

Fall Experimental

	Concentration			
	20-50 min.	60-70 min.	80-90 min.	Total
B: no	3	3	4	10
C: yes	4	7	2	13
Total	7	10	6	23

Chi-Square 2.053
Differences in the distributions are not significant.

Data #5

Fall Experimental

	Actual Work Time			
	10-40 min.	50-70 min.	80-90 min.	Total
A: yes	1	7	2	10
B: no	2	4	4	10
Total	3	11	6	20

Chi-Square 1.818
Differences in the distributions are not significant.

Data #6

Fall Experimental

	Actual Work Time			
	10-40 min.	50-70 min.	80-90 min.	Total
B: no	2	4	4	10
C: yes	3	6	4	13
Total	5	10	8	23

Chi-Square 0.212
Differences in the distributions are not significant.

Data #7

Fall Experimental (12/13)

	Interest in Work			
	Low	Med.	High	Total
A: yes	4	2		6
B: no	5	2		7
Total	9	4		13

Chi-Square 0.034
Differences in the distributions are not significant.

Data #8

Fall Experimental (12/13)

	Concentration		
	10-60 min.	70-90 min.	Total
A: yes	1	5	6
B: no	6	1	7
Total	7	6	13

Chi-Square 6.198
Level of significance is .05

Yes=Students listened to tape(s)
No=Students did not listen to tape(s)

Data #9

Fall Experimental (12/13)

	Actual Work Time		
	10-70 min.	80-90 min.	Total
A: yes	5	1	6
B: no	6	1	7
Total	11	2	13

Chi-Square 0.014
Differences in the distributions are not significant.

Data #10

Fall Experimental (12/11)

	Interest in Work		
	Low	High	Total
A: yes	1	1	2
B: no	4	4	8
Total	5	5	10

Chi-Square 0.0
Differences in the distributions are not significant.

Data #13

Fall Experimental (11/27)

	Interest in Work		
	Low	High	Total
A: yes	4	6	10
B: no	2	1	3
Total	6	7	13

Chi-Square 0.660
Differences in the distributions are not significant.

Data #14

Fall Experimental (11/27)

	Concentration		
	10-50 min.	60-90 min.	Total
A: yes	2	8	10
B: no	2	1	3
Total	4	9	13

Chi-Square 2.359
Differences in the distributions are not significant.

Yes=Students listened to tape(s)
No=Students did not listen to tape(s)

Data #15

Fall Experimental (11/27)

	Actual Work Time		
	10-60 min.	70-90 min.	Total
A: yes	3	7	10
B: no	1	2	3
Total	4	9	13

Chi-Square 0.012
Differences in the distributions are not significant.

Data #16

Fall Control

	Interest in Work			
	Low	Med.	High	Total
A: no	3	4	5	12
B: no	1	2	4	7
Total	4	6	9	19

Chi-Square 0.496
Differences in the distributions are not significant.

Data #17

Fall Control

	Concentration			
	10-40 min.	50-70 min.	80-90 min.	Total
A: no	2	5	5	12
B: no	1	4	2	7
Total	3	9	7	19

Chi-Square 0.445
Differences in the distributions are not significant.

Data #18

Fall Control

	Actual Work Time			
	10-50 min.	60-70 min.	80-90 min.	Total
A: no	3	4	5	12
B: no	2	3	2	7
Total	5	7	7	19

Chi-Square 0.336
Differences in the distributions are not significant.

Data #19

Spring Experimental

	Interest in Work			
	Low	Med.	High	Total
A: yes	1	5	8	14
B: no	2	7	3	12
Total	3	12	11	26

Chi-Square 2.802
Differences in the distributions are not significant.

Data #20

Spring Experimental

	Interest in Work			
	Low	Med.	High	Total
B: no	2	7	3	12
C: yes	1	10	3	14
Total	3	17	6	26

Chi-Square 0.713
Differences in the distributions are not significant.

Data #21

Spring Experimental

	Concentration			
	10-40 min.	50-60 min.	70-90 min.	Total
A: yes	6	4	4	14
B: no	3	6	3	12
Total	9	10	7	26

Chi-Square 1.397
Differences in the distributions are not significant.

Data #22

Spring Experimental

	Concentration			
	10-40 min.	50-60 min.	70-90 min.	Total
B: no	3	6	3	12
C: yes	7	5	2	14
Total	10	11	5	26

Chi-Square 1.747
Differences in the distributions are not significant.

Yes=Students listened to tape(s)

No=Students did not listen to tape(s)

Data #23

Spring Experimental

	Actual Work Time			
	10-40 min.	50-70 min.	80-90 min.	Total
A: yes	1	9	3	13
B: no	1	8	3	12
Total	2	17	6	25

Chi-Square 0.019
Differences in the distributions are not significant.

Data #24

Spring Experimental

	Actual Work Time			
	10-40 min.	50-70 min.	80-90 min.	Total
B: no	1	8	3	12
C: yes	5	6	3	14
Total	6	14	6	26

Chi-Square 2.815
Differences in the distributions are not significant.

Data #25

Spring Control

	Interest in Work			
	Low	Med.	High	Total
A: no	11	4	6	21
B: no	6	4	2	12
C: no	6	4	2	12
Total	23	12	10	45

Chi-Square 1.584
Differences in the distributions are not significant.

Data #26

Spring Control

	Concentration			
	10-40 min.	50-70 min.	80-90 min.	Total
A: no	7	9	5	21
B: no	4	6	2	12
C: no	2	7	3	12
Total	13	22	10	45

Chi-Square 1.457
Differences in the distributions are not significant.

Data #27

Spring Control

	Actual Work Time			
	10-40 min.	50-70 min.	80-90 min.	Total
A: no	2	11	8	21
B: no	3	7	2	12
C: no	2	7	3	12
Total	7	25		45

Chi-Square 2.560
Differences in the distributions are not significant.

Data #28

Spring Experimental & Control

	Interest in Work		
	Low	High	Total
Exp. A/C: yes	11	17	28
Con. A/B/C: no	22	22	44
Total	33	39	72

Chi-Square 0.791
Differences in the distributions are not significant.

Data #29

Spring Experimental & Control

	Concentration		
	10-60	70-90	Total
Exp. A/C: yes	22	6	28
Con. A/B/C: no	28	17	45
Total	50	23	73

Chi-Square 2.138
Differences in the distributions are not significant.

Data #30

Spring Experimental & Control

	Actual Work Time		
	10-60 min.	70-90 min.	Total
Exp. A/C: yes	15	12	27
Con. A/B/C: no	20	25	45
Total	35	37	72

Chi-Square 0.834
Differences in the distributions are not significant.

Data #31

Fall Experimental & Control

	Interest in Work			
	Low	Med.	High	Total
Exp. A/C: yes	5	8	10	23
Con. A/B: no	6	4	9	19
Total	11	12	19	42

Chi-Square 1.106
Differences in the distributions are not significant.

Data #32

Fall Experimental & Control

	Concentration		
	10-60	70-90	Total
Exp. A/C: yes	15	8	23
Con. A/B: no	10	9	19
Total	25	17	42

Chi-Square 0.684
Differences in the distributions are not significant.

Yes=Students listened to tape(s)
No=Students did not listen to tape(s)

Data #33

Fall Experimental & Control

	Actual Work Time 10-60 min.	70-90 min.	Total
Exp. A/C: yes	7	16	23
Con. A/B: no	7	12	19
Total	14	28	42

Chi-Square 0.192
Differences in the distributions are not significant.

Data #34

Spring Experimental & Control

	Interest in Work Low	High	Total
Exp. B: no	6	6	12
Con. B: no	5	6	11
Total	11	12	23

Chi-Square 0.048
Differences in the distributions are not significant.

Data #35

Spring Experimental & Control

	Concentration 10-60 min.	70-90 min.	Total
Exp. B: no	9	3	12
Con. B: no	9	3	12
Total	18	6	24

Chi-Square 0.0
Differences in the distributions are not significant.

Data #36

Spring Experimental & Control

	Actual Work Time 10-60 min.	70-90 min.	Total
Exp. B: no	6	6	12
Con. B: no	7	2	9
Total	13	8	21

Chi-Square 1.683
Differences in the distributions are not significant.

Data #37

Fall & Spring Experimental

	Interest in Work Low	High	Total
Fall A/C: yes	5	10	15
Spring A/C: yes	11	17	28
Total	16	27	43

Chi-Square 0.148
Differences in the distributions are not significant.

Data #38

Fall & Spring Experimental

	Concentration 10-60 min.	70-90 min.	Total
Fall A/C: yes	15	8	23
Spring A/C: yes	22	6	28
Total	37	14	51

Chi-Square 1.131
Differences in the distributions are not significant.

Data #39

Fall & Spring Experimental

	Actual Work Time 10-60 min.	70-90 min.	Total
Fall A/C: yes	7	16	23
Spring A/C: yes	15	12	27
Total	22	28	50

Chi-Square 0.252
Differences in the distributions are not significant.

Yes=Students listened to tape(s)
No=Students did not listen to tape(s)

CHAPTER #7

EXTENDED OPPORTUNITY PROGRAM SERVICES
ATTITUDE CHANGE PROJECT

BY: LORINE A. AUGHINBAUGH
American River College, July, 1974

In the spring of 1973, American River College accepted an invitation to participate in the EOPS Attitude Change Project funded through the Chancellor's Office - California Community Colleges. The counseling staff at American River had been concerned for some time about developing ways in which the "will to succeed" could be strengthened for many of the low income/minority students who were recruited and brought into the college. This project provided an opportunity to determine under experimental conditions if the motivation of EOPS students could be increased by the use of attitude change packages.

Since the fall of 1972 several counselors who have been concerned with the problems faced by the low income/minority students, as they attempt to adjust to college life, have invited these students to join multiple counseling groups. The groups have been set up to meet twice a week for one hour for nine weeks to survey "college opportunities, including focus on goals and objectives, requirements, techniques, skills, and attitudes compatible with success in college." These counseling groups offered a natural medium for the introduction of the attitude change packages to new students. (Phase I) It was also planned that later in the year groups of tutors (Phase II) and groups of counselor aides (Phase III) would have the opportunity also to work with the attitude change materials.

The following experimental design was selected for all three phases of the project.

	Select	Groups	Treatment	Post Test Criteria
Phase I				
	R	O Exp. (1 and 2)	X Regular Program plus Attitude Change Packages	Grades, Retention
	R	O Control (3,4,5)	Regular Program	
Phase II				
	R	O Exp. (T1)	X Regular Program plus Attitude Change Packages	Grades, Retention, Success with tutees
	R	O Control (T2)	Regular Program	
Phase III				
	R	O Exp. (C1)	X Regular Program plus Attitude Change Packages	Retention Fall '74, Success as a Counselor Aide - Fall '74
	R	O Control (C2)	Regular Program	

Phase I 1st 9 weeks - Fall Semester

When the newly recruited EOPS students reported for admission orientation and counseling during August, the fifty students who had the poorest high school records were to be invited to join the multiple counseling groups which best fit their class schedule in the fall. Five groups were to be scheduled at various times throughout the day and the week.

The two experimental groups (E1 and 2) were to make use of selected attitude change packages as a means of introducing topics for discussion and were to urge their students to review the tapes on their own time. It was planned that one male and one female counselor would conduct the experimental groups.

The three control groups (C1,2,3) were to continue the program as usual.

Records on all five groups were to be maintained by the group counselor. These were to include group attendance, a short anecdotal record on each session, and the counselor's reaction to the group and its progress.

Phase II 2nd 9 weeks - Fall Semester

Prior to the second half of the Fall Semester, the EOPS Director was to select twenty-four tutors to be assigned at random to two in-service training groups - one experimental (E T1) and one control (C T1). These two groups were to be conducted in the same manner, each meeting nine times for one hour sessions. However, in addition to the regular tutorial training, the experimental group would be introduced to the use of the attitude change tapes. The EOPS Director would conduct the control group and one of the counselors who had previously worked with the tutors would have the experimental group. Records were to be maintained as before.

Phase III 3rd 9 weeks - Spring Semester

The EOPS Director was to invite twenty-four students who were interested in being employed as counselor aides during the summer of '74 to participate in an in-service training program. These students were to be assigned randomly to two groups, one experimental (E C1) and one control (C C2). The EOPS Director and the same counselor who had worked with the tutors would again work with these students. Again the only change would be the introduction of the tapes to the experimental group. Records would again be maintained.

Procedures

Dr. Paul Preising met with the research director, the Dean of Student Personnel, and the counselor who had agreed to supervise the project on June 22, 1973 to explain the project, discuss use of tapes, and final reporting procedures.

Following this meeting, the supervising counselor checked to see which of the other group counselors would be available during the summer to work with the tapes and be ready to use them in the fall. Although the original plan had been to have one male and female counselor work with the experimental groups, the only available counselor was also male. However their ethnic backgrounds were different - one was Afro American and one was Chicano.

Forms for group use were developed and the five counselors, two experimental, three control, the EOPS Director, the Research Director, and the Dean of Special

Services met the first week in September to review the project and to be certain that each participant understood his responsibility.

At the end of the first two weeks, the Research Director and the two experimental group counselors met to discuss the problems which they were encountering. The students in their groups were not responding to the tapes, even when small pertinent sections were used - either before or after a related discussion. They expressed the opinion that the vocabulary and examples were beyond the general level of the student's comprehension and experience, so the students were turned off, rather than on. After some discussion, it was agreed that temporarily they would return to a discussion of specific problems raised by the students and then later reintroduce the tapes when appropriate. They would also urge some of the students who had shown an interest in the taped materials to continue to listen to them in the library.

At the end of the first seven weeks, the entire project staff met to review the final report materials and to finalize plans for the 2nd 9 week groups.

FINDINGS

Phase I - (see Table 1a and 1b - pages 4 and 5)

Forty-four of the fifty students invited to attend one of the multiple counseling groups responded - twenty-two (12 and 10) in the two experimental groups and twenty-two (7,10 and 5) in the three control groups.

When the results are summarized little difference between the two groups is apparent, except for the mean GPA.

	Experimental	Control
Improved or equaled GPA in Spring	6	5
Did not improve GPA in Spring*	2	12
W/D in Fall	1	1
Did not return for Spring	5	5
Returned in Spring - after W/D	1	0
W/D in Spring or did not return when successful in Fall	2	2
W/D in Spring*	8	0
*Added together	10	12
Mean GPA Fall	1.65	2.49

As all of the students in the two groups were newly recruited and with past records which indicated academic difficulty, it was assumed that a random distribution would result even though each student was free to join the group which best fit his schedule. The wide disparity in the Mean GPA for the two groups suggests that some factor may have been present which caused an ability grouping.

The only other difference between the groups, the greater number of experimental students who W/D in the spring, could also be a reflection of the ability level. These students should be followed for at least a year to determine if they reregister, if they were withdrawing to protect their GPA's, or if in fact they exhibited even less motivation than the control group.

TABLE 1a

PHASE I Student Motivation Study - Experimental Students

			Fall 1973 GPA	Spring 1974 GPA	
1m	571-04-6470	BB	2.60	3.10	+ .50
2m	297-46-9378	CD	2.00	2.33	+ .33
3m	567-98-7364	MG	3.30	W/D	
4m	565-13-6511	IH	1.76	W/D	
5m	446-60-3344	ML	2.41	1.00	- .41
6m	565-13-9672	RM	1.57	W/D	
7m	561-92-4842	JP	2.10	2.09	=
8m	548-98-7363	DS	1.10	W/D	
9m	558-23-6420	DS	1.42	1.15	- .27
10m	546-90-0210	AS	1.32	Not reg.	
11m	567-98-6107	IW	1.60	W/D	
12m	567-98-6653	VW	1.40	1.66	+ .26
13a	362-64-8043	HF	2.25	2.25	=
14a	565-88-6661	LG	1.50	Not reg.	
15a	555-94-0695	PH	.60	W/D	
16a	568-91-6706	WJ	.37	Not reg.	
17a	569-90-3287	EL	.80	W/D	
18a	457-98-2327	MM	W/D	1.00	
19a	548-13-7061	VM	1.00	Not reg.	
20a	572-11-3890	MP	3.00	Not reg.	
21a	551-11-2896	ES	.40	W/D	
22a	572-11-5404	JW	2.30	2.92	+ .60

TABLE 1b

PHASE I Student Motivation Study - Control Students

			Fall 1973 GPA	Spring 1974 GPA	
1c	570-92-3540	DB	2.85	2.25	- .60
2c	553-82-0421	MG	3.00	2.00	-1.00
3c	567-98-5927	AJ	2.44	2.37	- .07
4c	563-11-8238	LM	2.37	1.37	-1.00
5c	562-04-3310	DR	2.46	2.62	+ .20
6c	560-76-6064	BR	3.14	1.70	-1.44
7c	555-06-4569	TW	2.90	2.42	- .48
8h	568-98-9406	DA	2.18	1.85	- .33
9h	558-08-6611	ID	2.00	Not reg.	
10h	524-86-1991	MH	2.40	3.08	+ .68
11h	567-98-4053	PH	2.75	2.11	- .64
12h	572-11-6233	JL	2.54	3.45	+ .91
13h	453-82-2146	ML	3.25	3.10	- .15
14h	568-94-6867	JP	2.62	2.11	- .51
15h	548-98-4936	CR	2.37	3.38	+1.01
16h	546-90-3205	RR	.60	Not reg.	
17h	451-92-0857	RW	2.66	3.07	+ .41
18n	421-76-6812	BA	3.00	Not reg.	
19n	555-06-0932	RC	2.18	2.00	- .18
20n	587-34-6064	SF	1.00	Not reg.	
21n	570-92-6006	SG	3.71	2.57	-1.14
22n	422-58-8177	HR	W/D	Not reg.	

Phase II

TABLE II

The second phase of the project was to establish two groups of tutors for in-service training. Although the original plan had been to train twenty-four tutors, only ten student tutors could arrange their schedules to meet with the Director (6) and the counselor (4). The size of these groups was a limiting factor for good group discussion.

Experimental			Spring 1973	Fall 1973	Spring 1974
1n	DC	Returning	3.48	3.16	Graduate
2n	PK	New	- --	2.00	3.00
3n	AL	Returning	2.48	4.00	Graduate
4n	MW	Returning	2.64	2.64	3.16
Control					
1c	HC	Returning	2.43	2.75	2.44
2c	RL	New	- --	3.36	4.00
3c	CMcB	Returning	4.00	3.75	3.50
4c	PN	New	- --	3.66	4.00
5c	JP	Returning	2.87	2.62	Graduate
6c	MS	New	- --	2.62	3.30

Although the size of the groups make it impossible to draw any conclusions, the following observations can be made. The two students in the experimental group who did not graduate, did improve their semester GPA score. Three-fifths of the control students improved, while two-fifths did not. One graduated.

As only two of the experimental students were available spring semester, no comparison of the tutees for the two groups was feasible.

Phase III

Although it had been planned originally that twenty-four students would be trained as counselor aides, when it was learned that the curtailment of funds would make it difficult to hire more than twelve students during the summer, only twelve were invited to participate.

No data will be available on the retention and success of the counselor aides until after the beginning of the Fall 1974 semester.

Conclusions

1. The level of preparation of the students and the manner of presentation of the attitude change packages did not make for a successful experiment at American River College. The two experimental counselors felt that taped materials to be successful with recruited minority students who have many academic disadvantages will have to: 1) be narrated by someone whose diction and vocabulary more nearly matches patterns familiar to them and 2) be based upon examples which are within their experience.

2. All of the counselors have agreed to meet and develop a common outline and list of materials which will be used in future multiple counseling groups. Serious consideration will be given to the development of short "motivational" tapes. See appendix.

3. A set of Nightingale-Conant tapes have been purchased and are available for use by students in the library. The intent is to recommend that the more capable students in the groups use these materials on an individual basis.

APPENDIXES

1. Example of Forms

   Anecdotal Class Record Card

   Student Evaluation Sheet

2. Suggested Revised Group Discussion Outline (includes materials to be purchased)

3. Comments from Group Leaders

Appendix 1

Example of Forms

Anecdotal Class Record Card

Student Evaluation Sheet

Appendix 1

INSTRUCTOR_____ DATE_____

No. IN GROUP_____ NO. ATTENDED_____

WHAT HAPPENED, OR WHAT WAS COVERED IN GROUP?

YOUR REACTION TO GROUP MEETING.

Appendix 1

AMERICAN RIVER COLLEGE
STUDENT PERSONNEL SERVICES
COUNSELING CENTER

PSYCHOLOGY C GROUP COUNSELOR_____

NAME_____ AGE_____ MALE OR FEMALE_____

Indicate goal or major_____

Indicate semester and year you intend to graduate or transfer_____

Do you plan to attend a four year school? Yes_____ No_____

If no, what will you be doing?_____

_____

Do you live with your parents? Yes_____ No_____

Do you support yourself? Yes_____ No_____

Have you ever been in a counseling group before? Yes_____ No_____

What do you like most about the group?_____

_____

_____

_____

What do you like least about the group?_____

_____

_____

_____

Would you recommend this type of group to a friend? Yes_____ No_____

If not, why not?_____

_____

_____

_____

Appendix 2

Suggested Revised Group Discussion Outline (includes materials to be purchased)

PSYCHOLOGY C

As a group we recommend that a workshop be established in the first week of August to formulate and plan for the fall semester. We would considered the processes listed on the following pages as to there feasibility and value for future use. Further, we feel we should be working more closely with the counselor aides to have them understand what we as counselors are trying to have the Psychology C program accomplish. We will also need to know how many students are to be expected and what materials and supplies have been purchased.

Maria Delgado Campbell

Barbara Hoffman

Esther Nelson

John McGregor (Project Director)

Jack Aguilar

Art Cardoza (EOPS Director)

TENTATIVE PSYCHOLOGY C SCHEDULE

FALL 1974

GENERAL AIMS

To assist the student with a survey of college opportunities, including focus on goals and objectives, course entrance requirements, techniques, skills, and attitudes compatible with success in college. In addition, discussions and guidance relating to personal problems, home life, self-respect, employment, scholarships and grants.

GOALS AND/OR OBJECTIVES

The goals of this class are:

1. To encourage the student to succeed inspite of previous failures.
2. To assist the student formulate individual goals.
3. To inspire confidence in ability to succeed.
4. To offer guidance in understanding and relating to others.
5. To assist in recognizing personal limitations and worth.

(First Week)

COLLEGE ADJUSTMENT

Suggested Activity: Verbal communication regarding students immediate problems, frustrations, needs and desires.

Examples: Books and Fees, Class conflicts, Instructors, Financial aid, Tutoring, Employment, Counseling appointment and other personal problems.

(Second Week)

FORMULATION OF INDIVIDUAL GOALS

Suggested Activity: Life Line Exercise.
Group discussions on differences and similarities of each person's life.

Materials:
1. 3X5 cards (100)
2. Yarn
3. Masking tape
4. Crayons (25 boxes) 16 crayons per box

(Third Week)

UNDERSTANDING PERSONAL GOALS

Suggested Activity: Student should write out a goal that he or she can achieve by the next day.

Goals should be:

a. Believable
b. Achievable
c. Must want to do it or need to do it.
d. Should not infringe on others.

Examples: Present academic goals, regarding class assignments, personal commitments or any other responsibility may be undertaken for this activity.

Facilatator will assist student in the planning and the follow-through of the goals.

Materials: 3X5 cards
Books - Shared Journey

Value Clarification

Evaluation: Open expressions of completed or non-completed goals. Reasons why. Fill out evaluation forms.

(Fourth Week)

BUILDING SELF-CONFIDENCE

(Who Am I ?)

Suggested Activity: Sharing life styles and interest; Self Portrait Silhoutte.

Hand out Outline

See outline Outline - Response to the following.
Viewing of film 561 - "Finding Your Life Work"

Fourth Week Con't

NAME:
AGE:
LIKES:
FAMILY LIFE: (Highlights)
HIGH SCHOOL: (Highlights)
COLLEGE EXPECTATIONS:

Group Discussion - Individual achievements and expectations.

Materials:
1. Butcher Paper
2. Crayons

(Fifth Week)

RELATING TO OTHERS

An awareness of communication skills, body language, appearence, gesture and personality.

Suggested Activity:
1. Flexible Discussion
2. Role Play
3. Video Tape or Film

Materials:
Film - "Everybody's Prejudiced" No. 526
" I Am Joaquin"
Book - Balanced Living Program

(Sixth Week)

SELF-WORTH AND PERCEPTION

Goals: To encourage the student to develop a positive attitude about himself. To discuss openly his immediate feelings and share future plans with the group.

Suggested Activity: Ask each student to share some of his/her outstanding personal qualities he/she has.

Talk about how these personal qualities can be improved.

(Sixth Week Con't)

1. Pass out 5X8 cards and have each student answer the following questions about his/her future, say 5 to 10 yrs. from now.

2. What income bracket do you perceive yourself to be in, in the next 5 to 10 yrs?
   a. How do you plan to make the money you stated above?

3. Describe your marital situation.

4. Describe your standard living.

5. Describe your recreation, hobbies, travel. Estimate the annual cost of your recreational life style.

6 Describe the type of people with whom you plan to associate - include their social, ecomonic and educational status.

Materials: Books - "Self Development and Career Exploration"

(Seventh Week)

ACADEMICS

Goals: To assist the student in solving immediate academic problems he/she is personally encountering.

Suggested Activity:
1. Library Tour - (working tour) - Dick Bailey will assist.
2. How to study for an exam.
3. Sharing an assignment with the group.
4. How to proof-read materials and assignments.
5. Availability of tutoring.
6. Teacher - student contacts.
7. Incomplete Assignments.
8. Make-up test.
9. Importance of Instructor - student conferences.

(Eighth Week)

SELF DISCIPLINE

Goals: To learn to deal with procrastination.

Suggested Activity:
1. Select a task that "must" be done.
2. Break the task into segments which can be done quickly.
3. Go to work on the task, at once.
4. Complete each part of the task in the order of importance.
5. Reward yourself as you complete each portion of your task.

Group Discussion: Share the project experience with the group.

Examples of task:
Home chores.
Class assignments.
Personal task.

Materials: Presentation of video tape or film on self discipline. Should be selected by group leader.

(Ninth Week)

KNITTING IT ALL TOGETHER

Goal: To evaluate the group sessions and encourage suggestions for future.

1. Forms - Completed.
2. Student feed back.
   a. Analysis of activities.
   b. Recommendations.

MATERIALS

1. The Shared Journey - Introduction to Encounter
   Terry O'Bannion
   Available in our Book Store $3.68 per copy

2. Values Clarifications
   Sidney B. Simm, Leland W. Howe, Howard Kirchebaum
   Hart Publishing Company Inc., New York City, New York, 10003
   3.95 per copy
   10 copies - 39.50

3. Self Development and Career Explanation
   Kenneth W. Griswold
   P. O. Box 4243 - Rockford, Illinoise
   10 copies at 4.50 plus tax per copy

4. Video Tapes

Reel to Reel 1/2 inch	1 hour	20.00	2 each	40.00
Cartridge	35 min.	23.00	2 each	46.00

5. Large tape reels
   1 hour reel 1200 ft. 2.45 5 each 12.50
   Total 219.80

6. Crayons
   25 Boxes (small)

7. One spool of yarn
   any color

Appendix 3

Comments from Group Leaders

Comments from Group Leaders

Phase I - Experimental Group 1

There were twelve people in my group who were present when the evaluation questionnaires were passed out to the students. The group consisted of ten females and two males. Eleven of the group were Black with the other being one female Mexican American. The age range was 17 to 19 with the majority being 18.

The group was scheduled from 12:00 to 1:00 on Mondays and Wednesdays, for the first nine weeks of the fall semester. In those nine weeks we met 14 times. There were 18 students who signed up for the group but the average attendance was 10 to 12.

The general plan for this group was experimental in that the attitudinal change tapes were to be used. The first tape was introduced at the second session and allowed to play all the way through. The students were asked to evaluate what was said as well as how it was stated. The group was restless and inattentive very early into the tape. Two or three responded favorably; three or four responded negatively relating that the tape was monotonous and that it put them to sleep; the narrator never took a breath. The group was asked about hearing additional tapes and it was decided to put the tapes off for awhile.

During the next weeks what I tried to do with varying successes and failures was to try and cover attitudes without using the tapes. Listed below are some of the topics covered.

1. Peer group and societal pressure as it relates to personal decisions.

2. Similarities; jobs, experiences, parents'education that affected their decisions or biases relating to where they "are" now.

3. What to do if you don't understand or don't like what is going on in a class.

4. Careers; how education affects a career. What can be done to stop worrying about the future.

5. Apathy; when each member first became aware of prejudice or bias.

6. Attitudes about sexism in driving. Do you have the right to complain about poor service - how do you go about it.

7. Relationship with parents; how do you deal with them.

8. Religion as it relates to everyday life.

My impression of the students was that in many ways they were naive in most areas and had done very little in the way of thinking about their beliefs. There was a great deal of difficulty for them to express themselves even among there "peers."

The attitude that was most prevalent and that also had the most impact was that of fatalism. Almost to a member the students believed, or did not believe,

that they had any control over what happened to them. This was consistent in the way many of the students had trouble extending their thoughts to other than the present situation.

The group was very important to the students in that it gave them an opportunity to express themselves and to be questioned, not criticized. Further, they were able to see an authority figure close up. It gave use to lay term relationship with counselors that could not be established in the regular counseling situation. Last but probably the most important it gave the student a variety of new experiences and directions to build upon.

There were three or four people who showed leadership ability and this was proven out by them joining several on-campus activities.

Phase I - Experimental Group 2

Description of Group - The group consisted of ten members, four males and six females. There were nine Blacks and one Mexican American. They ranged in age from 18 years to 21 years.

Attendance - The group met for nine weeks with meetings taking place on Tuesdays and Thursdays for one hour. There were never less than seven students in attendance, with the average being eight students in attendance.

General Plan - This being an experimental group, it was decided to use the Nightingale-Conant tapes as the basis for our experiment. The plan was to use these "Attitude Change" tapes each session in order to give direction to the group for that session. I felt that I was able to "sell" the value of using fairly sophisticated material with what I would lable as non-verbal students.

We used tapes numbered one through six. For the first four sessions the students received the use of the tapes with an "open mind." During the fifth and sixth sessions the students asked that the tapes not be used, and that the group leader explain or interpret the material on the tapes. During the remaining sessions, ideas or topics covered by the tapes were discussed.

Student reaction to the tapes varied, several students indicated that the tapes were of value, others indicated that the material was too difficult to understand and should be abandoned. In an attempt to maintain the interest and motivation of the group, I decided to use material from the tapes but not the tapes themselves.

Student Attitude - I received mixed reactions from the group. Most students indicated that they felt a need for such an approach. All students throughout the nine weeks contacted me at one time or another regarding school related problems. All students also indicated that they would continue with such a group if it were offered for the second nine weeks. On the issue of whether or not leadership was developed through the group, I was not able to determine if the sessions that we had were of any effect in this area.

Phase I - Control Group 1

The group consisted of three Black men and five Black women, and one Chicano man and one Chicano woman. Ages ranged from 19 to 26. We met twice a week for one hour, Tuesdays and Thursdays from 1 to 2 p.m. The attendance was good with the exception of two Black males who made all kinds of excuses as to why they couldn not come to class.

I formed a circle of desks and had students sit together and talk about any problems they had that day or week; school, personal, financial, etc.

In the beginning I felt students' attitude was bad. They cut class, arrived late, wanted to leave early and not do anything.

I got mad and told them that I was there for them and they should be, too. If they had no commitment for coming and getting classmates there, then I was wasting my time and was going to quit. After this students were on time, participated and seemed to enjoy talking about their problems and trying to help each other with solutions or suggestions.

Leadership was assumed by two Black females.

The last class period was set aside for a party and criticism and reactions of class. Instead of going out to lunch we each brought something to eat that was homemade. I made tacos, students brought hot corn bread, black eye peas, greens with ham hocks, sodas, etc.

Recommendations

1. Role of counselor aide needs clarification.

2. Values clarification materials available and knowledge of how to use them.

3. Video taping and discussion of session with students.

Phase I - Control Group 2

The group consisted of ten students of whom nine were Black and one was Anglo. There were five females and five males. Ages ranged from 26 to 17; five of the students were 18. The meetings were fifty minutes long and were held twice a week at 9:00 a.m. Attendance was almost 100% throughout the nine weeks. The attendance of one student dropped off toward the end of the nine weeks.

The first few meetings consisted of introductions and dealing with reality problems relating to classes, schedules, etc. The rest of the sessions centered around use of the lifeline exercises.

The outstanding feature of the group was the students liking of each other. They were from similar backgrounds, several knew each other from high school and their ages were fairly close. The two older students (25,26) were of much more help than either of the aides that worked with the group. These students sparked discussion early in the life of the group by readily responding to whatever exercise was presented. By the fifth week it became unnecessary to present any exercise or plan an agenda as the group was able to self-start.

Racial issues often arose as discussion items especially toward the middle of the sessions (5th - 6th week) the sense of friendliness and trust among the Black

students made it much easier to accept an Anglo leader and the one Anglo member. Also the Anglo student was very much at ease in the group.

Most of the students commented several times that they would like to continue the group. Many of the students drop in to my office from time to time.

Phase I - Control Group 3

The students involved in Psychology C the first nine weeks during the fall represented a cross section of students. They were from several different high schools, their age span was from 19 to 27 years. Two of the men had been in the military. The one thing they had in common was all were born in the southern part of the United States.

The group began by sharing their first impressions of the American River College campus. The discussion soon led to their impressions of their class schedules, their teachers and their campus jobs (if employed).

The students were asked to give some thought as to where they would like to be by Fall 1974, which was next school year. During the fourth week, each person was asked to set a goal to be achieved by the next group meeting. The goal was to meet the following criteria:

1. Achievable - it was to be achievable in the time period available.

2. Believable - you must believe that you can achieve it.

3. Want to do it - it must be something you chose to do out of want, not a requirement or something you should do.

4. Measurable - it should be a measurable goal, stated in concrete terms.

5. Must be presented without alternatives - focus in on what you will do, avoid alternative goals which divide energy.

6. Should be non-injurious to you or others.

7. Goals should be set in relations to personal definition of satisfaction and achievement.

Students received this process with great apprehension. Two students stated that it is very difficult to plan something a week ahead. After much discussion the students began to write their goals on the blue card that had been given to them. The student was asked to seal the goals in an envelope (he was given), sign his name and date the envelope.

The purpose of this process is to get the students to focus on some important goals and objectives in his immediate surrounding.

1. To set a goal and work toward it and complete it.

2. To encourage growth experience.

3. After one week the goals were shared with the group.

This exercise was very difficult. Students listed goals (some of them) that were unrealistic. When this was pointed out, students talked of their needs and the important situations they were facing at this point.

Sharing goals and talking about their accomplishments was very difficult to talk about at first. Each student was praised for trying. Even though all of the goals were not achieved.

Making friends and getting acquainted with new people appeared to be an important factor to two of our students. So one session on making friends and getting to know people was arranged.

Students were asked to describe the ideal person for three minutes to the person sitting next to him, then the second person would do likewise. After this the group reassembled. Each individual was asked to share something good he had observed from the person he had just talked to.

The purpose of this exercise was to offer postive reinforcement and to encourage positive observance.

Phase II - Experimental Group (ET 1 - 2nd nine weeks)

This group was very similar in grade point average, interest and background. Their one concern is how to be an effective tutor or improve their effectiveness with the students.

Their reaction to Earl Nightingale's tape was with disagreement. Their attempt to relate the Nightingale theory to the poor student or the under achiever, was very difficult.

The theory of learning, positive and negative reinforcements, memory techniques and communication skills were presented along with the Nightingale tapes.

Phase II - Control Group (CT 1 - 2nd nine weeks)

The second nine week program was composed of tutors who were in a control group situation. The group consisted of two females and four males. One of these members was a minority and he was a Chicano. The ages of the members were 18,19,19, 20,21, and 60. The group met six times during which attendance was at an average of five people in attendance at all times. A general plan was followed having the participants know one another better and tell some things about each other. The student attitude as I perceived it was good especially from the older members of the group. Individual experiences were welcomed with enthusiasm from the other members of the group. The leaders of the group were again the older members.

The material covered was mainly methods and techniques of tutoring and giving an insight on how to work with different people of different races. I attempted to stress respect for individual differences and the enhancement of self dignity.

My recommendations for such a group would be to video tape a session or two and present more exercises on human development. The roll playing exercises were very productive. I do feel it is good to follow a scheduled plan allowing for some flexibility.

Phase III - Experimental Group (EC 1)

The College Awareness Aides were not as receptive as the first two groups. The participation and attendance was very poor. The group did not want to discuss goals and objectives. They were receptive of the responsibilities of the Counselor Aide as how to do a better job.

Guidance sessions on choosing a career and getting acquainted with the view machine and other career information.

Students were asked to share their ideas, opinions and their feelings regarding: Black Power, Chicano Power, Freedom, Money, Clothes, Religion, Age, Love and Establishment.

The exercise "Me and Fantasy" was presented to the group. They were told that fantasies are a way by which an individual can try on or test different roles or life styles.

Instructions: Spend a few minutes quietly and think about what an ideal day in your future might be like if you could go any place you want, had the necessary skills, money and other resources you needed.

The group was given five minutes to write their fantasies on paper. The fantasies were then shared with the group. Some of the reasons why the group did not respond to this exercise on a more positive vain were expressed as follows: 1) I can't think like that; 2) That is scary; 3) I don't believe in false trips; and 4) I don't like play.

The staff realized that long range planning is very difficult for many poor people. Getting them to fantacise is equally difficult.

Phase III - Control Group (CC 1)

The third nine week program was composed of College Awareness Aides who were in a control group situation. The group consisted of three females and three males All of the members were minority comprising of three blacks and three Chicanos. The ages of the members were 19,19,20,20,26, and 26. The group met six times during which attendance was at an average of five people. A general plan was followed beginning with an evaluation of the fall semester. The first session took off to a good start because all of the participants participated in the discussion and recommendations. As the sessions progressed the members were able to know each other better and sometimes the group did go off the general plan and talked about some personal problems in their lives. The general plan was flexible enough for new ideas and different discussions. The leaders of the group were the more experienced members. The two older members usually had something to say regarding their personal experiences with each of the different topics discussed.

The material covered was methods and techniques of recruiting, roll-playing exercises, awareness of college procedures and policy, and being a little more sensitive to student problems. The sharing of ideas was good which enabled the inexperienced students to react and take note.

My recommendations for such a group would be to video tape a roll-playing exercise showing some of the positives and negatives through the use of an audio-visual concept. I would also present more lessons on the use of our humanistic qualities focussing on group leadership.

CHAPTER #8

"LEAD THE FIELD" MOTIVATIONAL TAPES AS A TUTORIAL AID

Walter Brooks and Susan Mosby
Shasta College, July, 1974

Purpose

The purpose of this investigation was to determine the utility of the "Lead the Field" tapes as an academic motivational device in a specific community college tutorial setting. Shasta College was one of several community colleges which attempted to determine the feasibility of improving tutorial services through the use of the tapes. Dr. Paul Preising, of San Jose City College, in cooperation with the California Community College Chancellor's Office staff, initiated this field test after the tapes had proven to be a successful motivational device in at least two courses of study offered at San Jose City College.

Hypothesis

The specific hypothesis of these field experiments was: Scholastic motivation of academically deficient students will increase as a result of the inclusion of the "Lead the Field" motivational tapes in the tutoring process.

Experimental Design

The use of the "Lead the Field" tapes at Shasta College might best be termed a limited field test rather than a controlled experiment. Although some measure of control was exercised and essential experimental design principles were followed, the groups involved in the experiment were quite small, making the statistical inference from the results risky.

Design Format - The treatment (T), or motivational tapes, was introduced to one group (GP1) but not the other (GP2). Assignment to the groups was made on a random basis (R). The two groups were then observed (O) on three criterion variables. The experimental design might be diagrammed as follows:

(R) (GP1) (T) (O)

(R) (GP2) (O)

Control Elements - One male and one female tutor were assigned to each of the two groups; students were randomly assigned to experimental and control conditions; and the same number of hours of contact between each tutor and tutee was required. Control over the course of study in which the student would be tutored was not possible. No attempt was made to control other extraneous variables such as the learning ability, and the initial motivational state of the student being tutored. Finally, the numbers involved in the two groups were too small for effective random assignment. Only two tutors and tutees were assigned to each of the groups. Obviously there was opportunity for a number of factors to affect the outcome of the investigation other than specified treatment.

The complete experimental situation might be diagrammed as follows:

Experimental Group		Treatment	Criterion Variables
(Tutor)	(Tutee)	Introduction of motivational tapes with tutoring thirteen weeks, one hour per day.	Observation of: 1. Course grade in subject tutored 2. Change in GPA 3. Change in course persistence
Burris	Zollars		
Gascoyne	Espinoza		
Control Group		**No Treatment**	**Criterion Variables**
(Tutor)	(Tutee)	Tutoring only thirteen weeks, one hour per day.	Observation of: 1. Course grade in subject tutored 2. Change in GPA 3. Change in course persistence
Keeran	LeBel		
Dickerson	Free		

Operational Indices of Motivation - The most readily accessible criterion variables which might indicate change in the motivational levels were:

(1) The grade received in the course where tutoring was provided: Since no control was exercised on the initial GPA of the student and since only two students were involved in each of the conditions of the experiment, obviously there was a high liklihood that chance rather than the treatment

might account for observed differences in the grades received by students. But this criterion was included since it was felt that differences in grades between the two groups might have meaning when coupled with other measures of motivation.

(2) Change in overall GPA from the previous semester: It was felt that this more general measure of motivation might be less subject to bias than the course grade. Since the motivational tapes were intended to effect an overall change in the scholastic motivation of the student, an overall change in GPA might be an important indicator of motivation.

(3) Change in the persistence level from the previous semester: This was measured by a comparison with the previous semester of the percentage of the initially enrolled units the student completed. This would seem to be an especially important measure at Shasta College where an unlimited withdrawal policy offers the student the opportunity to withdraw from any course up until the final examination. Under this system a student receiving poor grades can exercise the withdrawal option when failure appears imminent. A decrease in the number of courses in which a withdrawal grade is taken might therefore be an important indicator of motivation in a college where the unlimited withdrawal grade is possible.

Procedure

In both the experimental and control conditions tutors met with tutees for one hour per week for a total of 13 weeks. During the hour the experimental group concentrated for 30 minutes on listening to and evaluating the motivational tapes. During the remaining half hour the tutor assisted the tutee with the subject-matter problem which had brought the student to the tutorial center. The tutors in the

control group met on the same time schedule for a total of 13 weeks, but in the case of the control group the entire hour was devoted to the subject-matter in the course of study where the tutee had encountered a problem.

Results

	% Units Completed		Increase(+)	Change in	Increase(+)	Grade in
	Fall	Spring	Decrease(-)	GPA	Decrease(-)	Course Tutored
Experimental						
Zollars	23%	65%	+	1.0 to 1.45	+	-C
Espinoza	100%	100%	0	2.7 to 2.3	-	C
Control						
LeBel	50%	29%	-	3.5 to 2.6	-	W
Free	100%	80%	-	2.6 to 2.2	-	W and B

All indicators of heightened motivation selected as criterion variables favored the experimental group. The experimental group received better grades in the course where tutoring was provided; completed more units than they had the previous semester; and had a better record than the control group in changes in their GPA. Obviously statistical analysis would be meaningless with groups of this size, but the prevasiveness of the difference in motivational indicators would suggest the need for further experimentation. This field test cannot be evaluated in isolation, but can only be considered in conjunction with the field tests of the motivational tapes which were conducted this last Spring Semester in other community colleges around the state.

Recommendations for Action

The most immediate value of this field test at the college was the interest the students providing the tutoring took in the experiment. Throughout the course of the 13 week test of the tapes the students continually made notes about the tapes recommending changes in both the language level and the motivational message. At

the request of Susan Mosby, the Tutor Coordinator who carried out the experiment, a summer faculty development project was developed to modify the tapes to make them more useful in the tutoring situation. Specifically, the narrative of the tapes was changed to make the language more understandable to the average or below average student who might not have a highly developed vocabulary, and further, to change the motivational direction to make the tapes more suitable to the academic setting rather than a business setting. The revised tapes have been recommended for use in the tutorial center at Shasta College during the Fall Semester on an experimental basis. The revised narrative for each of the tapes is attached to this report. While it is unlikely that any copyright privileges have been seriously violated through this modification, we would recommend that before the modified tapes are used in any other community college the Project Director or the Chancellor's Office make contact with the company to seek approval for a more general experimentation with the motivational tapes. It is the concerted opinion of those who used the tapes, both tutors and tutees, that the tapes, with modification, hold great potential value for the low-motivated student.

CHAPTER #9

IMPROVING STUDENT RETENTION AND GPA BY TRAINING TUTORS WITH COMMERCIALLY PRODUCED ATTITUDE CHANGE/MOTIVATION TAPES A PILOT STUDY

BY: PAUL P. PREISING
DIRECTOR - GRANTS AND RESEARCH

PROBLEM

One of the main components of low income minority projects is tutoring of project participants by student colleagues. Typically, the tutor is another student somewhat further advanced in his studies and most often not trained to tutor and effectively assist his tutee.

Evidence shows, nonetheless, that through on the job tutoring and fragmented efforts to train him, he develops skill in tutoring.

Investigation at San Jose City College of the skills possessed by most tutors reveals that their attitude and motivation to do a good job tutoring seems to be related to effective tutoring. However, typically, the neophyte tutor does not have skill in positively motivating his tutee and scheduling time or setting goals of learning.

One of these questions raised by the above is: can the college devise ways to provide effective motivation and skill training for the tutor of low income students on a short term basis with a minimum of professional staff involvement?

APPROACHES TO THE PROBLEM

Several approaches to the problem present themselves. One is to schedule prospective tutors into seminars and have certificated staff teach them skills thought related to effective tutoring. One of three difficulties with this approach is the identification of tutors and organization of seminars, which is especially time consuming if attempted before college starts. Another is the

rather heavy commitment of staff time, many of whom are already overloaded with teaching assignments and involvement with ongoing problems of college operations. Finally, if the seminars are set up and teachers assigned, there is the problem of seminar content and supervision of progress; someone in short, has to develop the software for the seminars.

While some colleges struggle with tutor training efforts similar to the above, others simply use a hit or miss approach. In these efforts tutors are identified, told to "go forth" and tutor. Since this approach seldom is well organized or supervised, the outcomes are often unknown. Justification for such an approach apparently is based upon the idea that the "Sturm und Drang" of extended opportunity programs is such that systematic efforts to work with students just are impractical to implement.

But there is another way. Why not borrow from industry and teach tutors with materials already developed for motivating and inparting time scheduling skills? Why not organize tutoring programs around such materials and provide the comparatively minimal professional help to insure such materials are used by tutor trainees?

HYPOTHESIS

Given the above, the hypothesis of this study is that community college tutors can be motivated and taught skills required for effective tutoring through the application of commercially produced attitude change/motivation tape cassettes.

In operational terms the hypothesis of this study is: Low income minority students tutored by tutors trained using Nightingale Conant Lead the Field tape

cassettes will have significantly higher ($P=\leq .05$) retention rates and semester GPA as compared to a comparable control group who were tutored by tutors not exposed to the tapes.

METHODOLOGY

At the beginning of the Spring 1974 semester, five* low income minority tutors were selected at random from a list of low income minority tutors to listen and react as a small group to Nightingale Conant tapes. The tapes were presented twice a week on Tuesdays and Thursdays for an hour each. Dr. Paul Preising, Director of Grants and Research, served as a small group leader and used selected tapes to trigger reactions and responses of the group. As much as possible, the group leader remained in the background allowing group members to make points and convince others of the value of the ideas presented.

After one week, one of the tutors dropped out. The apparent reason was that he was a foreign student and had real difficulty hearing the tapes, understanding their context, and interacting with the other tutors. After three weeks another tutor dropped from the group. Her explanation was that she agreed philosophically with the tapes, and although got a great deal out of them, the cost of gasoline and time were too great to continue. (It was later learned that this participant drove over 30 miles round trip to and from the college to participate for the hour of listening and reacting to the tapes). Thus, the experimental group was reduced to three persons who listened regularly twice a week for one hour each time for a period of 10 weeks.

*Originally 30 were selected; however, of the thirty only five could meet at the scheduled time.

During the experiment the tutors who participated in the experiment also continued to tutor. The students they tutored were identified and labeled the experimental group. The researcher also then identified all low income minority students at San Jose City College who received tutoring of one form or another during the Spring 1974 semester. This population included two groups - one was those tutees who enrolled in a formal class labeled Cooperative Learning Program 91 who were given course credit to learn skills and receive remedial tutoring. The other group consisted of all other tutees. Those tutees were non credit tutees who attended class for tutorial assistance.

FINDINGS

To avoid problems related to sampling error, it was decided to limit the generalizations to San Jose City College and treat each of the groups as a population. Thus, there are three tutee populations or groups in this study:

1. Those tutored by tutors who were exposed to small group training using the Nightingale Conant Tapes; hereafter, called the experimental group.
2. Tutees who were tutored on a non credit basis; hereafter, non credit tutees.
3. Tutees who enrolled in CLP 91 and received credit for being tutored; hereafter, credit tutees.

Taken together the totals of each of the groups above, add up to total number of students tutored at San Jose City College.

With regard to the hypothesis that the retention rates of the experimental group could be higher as compared to the retention rates of the other two groups, the following data are presented:

RETENTION RATES

	Retained	Dropped from School	Total	% Retained
Experimental Tutees	32	1	33	96.7
Credit Tutees	182	31	213	85.4
Non Credit Tutees	99	6	105	94.2
Total	313	38	321	

With regard to the hypothesis that the GPA of the experimental group would be higher as compared to the GPA of the other two groups, the following data are presented:

GPA

	n	Cumulative GPA	End of Semester GPA*	Gain or Loss	% Gain or Loss
Experimental	33	2.58	2.55	+.03	-1.2%
Credit	175	2.75	2.63	-.12	-4.4%
Non Credit	105	2.85	2.63	-.22	-7.7%

*Dropouts were assigned an end of semester GPA of 0.00

DISCUSSION

It is difficult to draw decisive inferences from the above data. One of the reasons for this is that both the credit and non credit cumulative GPA were higher as compared to the experimental group of tutees. Hence, the effects of regression to the mean would probably be greater for these groups as compared to the experimental group.

The researcher assigned a 0.00 GPA to students who dropped from school and, hence, tended to reduce the end of semester GPA average by a greater amount than would have accurred if the students cumulative GPA were used. However, given the nature of the study it seemed reasonable to assess this penalty.

That all of the tutees dropped in GPA for the Spring 1974 semester is partly a result of the assignment of 0.00 to the students who dropped. Another is that the average GPA's for these group is quite high and, hence, it is more likely for it to decrease as a group rather than increase.

There are too many pitfalls one encounters when dealing with gain scores and, consequently, the conclusions of this study have to be regarded tentative.

CONCLUSIONS

All three groups of tutees maintained respectable retention rates which is one of the main goals of the cooperative learning project for low income minority students. When one considers the high dropout risk of the low income minority student, the efficiency of some kind of tutoring is strongly supported.

As with the retention rates, the respectability of the GPA's of all three groups of tutees compares favorably with that of all other students at San Jose City College. The fact that all three groups showed small decreases at the end

of the semester is to be expected given regression problems and the comparatively high cumulative GPA of these students.

The data gathered tend to support the use of Nightingale Conant attitude change packages and small group instruction for the training of tutors. One should be aware, however, that there are some financial costs in terms of staff time and materials to provide this assistance.

Recognizing that the other tutee groups performed well without the special training, one could decide against special training of tutors. However, if there is concern for systematic improvement of the quality of tutoring, then the use of Nightingale Conant tapes is justified by this study.

Further, the study did not identify any negative outcomes for using the tapes in the training of tutors. After considerable experimentation with these tapes in this study and others, the results support the value of their continued use. They can be improved in terms of their relevance, or possibly by using a Black and/or female narrator, or by having the content altered to edit out words and phrases inimical to low income minority groups.

Attitude change tapes, such as Nightingale Conant represent another tool community colleges can make available to their students as well as their staff for the systematic improvement of learning.

CHAPTER #10

KEY FINDINGS OF FIELD TEST - SUMMARY AND DISCUSSION

The key results of this study are summarized by college in Table I. (See page 116). As can be seen, the data offer a mixed set of responses. Mount San Antonio College, which used the Mireles' Self Image Development materials, reported the most positive results. Shasta College showed positive results using the Nightingale Conant tapes, although the result was based upon a an "n" of four. The San Jose City College experiment showed positive results on one hypothesis and results in the predicted direction on the other.

Each of the colleges at which positive results with the attitude change tapes were recorded had one point in common - they all used small group discussion and follow up after requiring students to listen to the tapes. Thus, the "treatment variable" of these colleges was stronger than others since it made use not only of the tapes but provided the students with interpretations inferences and follow up. Brown in her study entitled IAOCS Research Project of Lead the Field Motivation Tapes recognizes on pages 66and 67of her report how critical is the use of discussion and follow up of the tapes by a trained professional. She makes it abundantly clear that the inculcation of negative attitudes takes years and that it follows that changing negative to positive attitudes cannot be simply accomplished in a short span of time unless there is considerable attention and follow through devoted to producing such change. All of the participating colleges had a clearer idea of this task and showed willingness to continue the efforts begun by this experimentation.

It should also be noted that although not all of the colleges participating achieved the objectives of increased GPA and retention rates, every one of them supported the use of attitude change tapes - be they, Nightingale Conant's

Lead the Field, Success Motivation, the Napoleon Hill series or S. Raymond Mireles', Self Image Development in connection with low income minority students. See Tables II and III pages 117 and 118 of this report.

The discrepancy between the results and the very encouraging recommendations for action can be explained to a large extent by the unanticipated finding that in practically every instance the comparisions made were between control and experimental groups both of which received tutoring of one kind or another while the experimental group in addition received the attitude change packages.

As Rogers points out on page 43 of his study, the results of which are also confirmed by Preising page 108 of this report, the outcome of the experimentation strongly supports the efficacy of some kind of tutoring. It should be kept in mind that both groups compared were getting tutoring of some kind or other. When retention rates reach 95% and GPA's 2.60 as in the Preising study Chapter 9, ceiling levels are approached. It became apparent that the "ceiling effect" was operating in most of the experiments reported herein. Said another way, many of the experiments were dealing with students who already were approaching limits of their capacity and that there just wasn't that much more improvement for them to make.

A good analogy for the above phenomenon can be found in the sport of track and field. For example, the competant runner of the 100 yard dash has little chance of increasing his improvement because the amount of leeway is only one or two seconds whereas the runner of the two mile race has anywhere from five to possibly twenty seconds leeway for improvement.

What became abundantly evident when talking to the individual project directors/researchers is their frank recognition of the difficulty of changing

student attitudes from negative to positive, but also the firm conviction that the effort should be made and every use of potential tools for effecting change should be employed. There was evidence that the experimentation reinforced the general belief that improving attitudes of community college students should be a central concern for community college personnel and that the process of undoing years of negative attitudes is truly a difficult but crucial task.

Another aspect of the "tutoring" vs. "tutoring plus attitude change tape" research model needs to be amplified. As pointed out each college worked with a control group that was tutored using existing tutoring approaches and was compared to an experimental group that employed the use of tutoring plus attitude change tapes. And in the case where positive improvements in GPA and retention rate were achieved, the treatment included besides tutoring and tapes, the use of small group discussion/follow up. One of the most salient unanticipated results of the study is the clear support for tutoring as a technique for improving the GPA and retention rates of low income minority students. Further, there is strong reason to suspect that the experimentation at each of the colleges caused tutors of both the experimental as well as control groups to try harder in their efforts to assist students. The result of this experimentation then may well have caused tutoring in the participating colleges to improve overall both control as well as experimental groups.

Another result of the experimentation proved positive in effect. Interest was kindled and concern generated for providing more effective services to low income minority students. Participants became aware of the indirect effects of trying to make positive attitude change. There is every reason to believe those involved became more sophisticated in their approach to attitude change.

After a careful review of the results and recommendations for action of each of the participating colleges, there are some guides or recommendations for action that are particularily relevant to the Chancellor of the California Community Colleges and specifically the Dean of the Extended Opportunity Program Services project. These recommendations are listed below.

RECOMMENDATIONS FOR ACTION

As can be seen from Tables II and III, all of the colleges that participated support continuing use of and/or research with commercially produced attitude change packages.

The recommendations presented to the State are based upon those of each of the participating colleges. In sum, it is recommended that:

1. Continued use and/or research be made with commercially produced attitude change packages in community colleges. Promising avenues of research involve strengthening treatment variables. For example, using tapes in small groups and providing for discussion, interpretation, and application. Also greater efforts should be made to secure and review other commercial attitude change packages and to pilot test those considered most relevant to the community college student and setting.

2. Commercially produced attitude change packages such as: Nightingale Conant, Napoleon Hill Series, Success Motivation, S. Raymond Mireles', Self Image Development, be purchased for use by students and made available to them from libraries and/or learning centers. Further, efforts should be made to acquaint libraries, learning center directors, and others who work in these areas with attitude change tapes that are commercially available, since use of these tapes is often dependent upon these key personnel.

3. Further refinement of attitude change packages be made to make them more relevant to community college students. For example, the Chancellor's Office should consider encouraging and assisting with financing those community colleges that have both the interest and expertise to develop refinements. Among those willing to do so are at least those who participated in this study.

4. Tutoring in some form continues to be supported by the Extended Opportunity Program Services Project as possibly one of the most effective means for assisting low income minority students. The Chancellor's Office should continue to support this activity and should encourage improvements leading to improved tutor effectiveness. Specific activities include formal tutor training, closer supervision of tutors, organization of tutoring activities, and tutor/tutoring evaluation.

5. The cooperation evidenced by this report between the participating colleges and the Chancellor's Office of the California Community Colleges should be continued. The gap between Sacramento and the field is reduced by formal efforts to test out ideas on a limited basis before making a total and extensive commitment for change. Such testing increases the probability that non productive change will be averted and changes that are implemented will have a greater chance for productive survival.

TABLE I

SELECTED KEY RESULTS OF PARTICIPATING COLLEGES

COLLEGES / RESULTS	Mount San Antonio	Santa Barbara City	San Fran. City	Reedley	El Camino	Amer. River	Shasta	San Jose City	East Los Angeles	South-western
Significant Increase in Semester GPA - experimental vs. Control	+	+	-	-	-	-	+	+	**	**
Significant Increase in Retention Rate - Experimental vs. Control	N/A	-	-	-	-	-	+	+	**	**
Significant Increase in Rate of Re-enrollment (Fall-Spring)	+	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A

+Significant Increase
-No Significant Increase
N/A Not tested
** Did not return report in time to include in write up.

TABLE II

SELECTED KEY RECOMMENDATIONS FOR COLLEGE LEVEL DECISION MAKERS

COLLEGES / RESULTS	Mount San Antonio	Santa Barbara City	San Fran. City	Reedley	El Camino	Amer. River	Shasta	San Jose City	East Los Angeles	South-western
Recommend Continued Use of Tapes	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Recommend Tailor Making Tapes to Community College Setting	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Recommend Use In Study Skills And/Or Career Development Classes	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Have Purchased Tapes for Use in Library Lab	YES	YES	YES	YES	YES	YES	YES	YES	**	**

** Did not return report in time to include in write up.

TABLE III

SELECTED KEY RECOMMENDATIONS FOR STATE LEVEL DECISION MAKERS

COLLEGES / RESULTS	Mount San Antonio	Santa Barbara City	San Fran. City	Reedley	El Camino	Amer. River	Shasta	San Jose City	East Los Angeles	South-western
Recommend Use With Low Income Minority Students	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Recommend Further Research Using Attitude Change Packages	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Recommend Tailor Making Attitude Change Packages for Use by Community College Students	YES	YES	YES	YES	YES	YES	YES	YES	**	**
Support Purchase of Attitude Change Packages for Use in Library and/or Community College Learning Labs	YES	YES	YES	YES	YES	YES	YES	YES	**	**

** Did not return report in time to include in write up.

APPENDIX A

INCREASING GPA AND STUDENT RETENTION OF LOW INCOME MINORITY COMMUNITY COLLEGE STUDENTS THROUGH APPLICATION OF NIGHTINGALE CONANT CHANGE PACKAGES - A PILOT STUDY

BY

Paul P. Preising
Administrative Assistant - Grants
San Jose City College

1973

Increasing GPA and Student Retention of Low Income Minority Community College Students Through Application of Nightingale Conant Change Packages - A Pilot Survey

PROBLEM

In a 1971 study entitled Increasing Student Retention Through Application of Attitude Change Packages by Paul P. Preising and Robert Frost, it was found that the dropout rate of unemployed aerospace engineers given Nightingale Conant attitude change packages and enrolled in computer science courses was significantly lower (P=.015) as compared to a comparable control group. This finding led to the research question of this study; namely, will the application of Nightingale Conant attitude change packages to low income minority community college students increase their grade point averages and retention rates in college?

RATIONALE AND HYPOTHESIS

The rationale for this study is basically detailed in the earlier study by Paul Preising and Robert Frost.[1] In brief the argument is that performance of the community college student is equal to ability multiplied by motivation. Of these two variables, ability is comparatively fixed; whereas, motivation varies from high to low. Consequently, to increase college performance efforts should be made to increase motivation in students. To illustrate the above point consider, for example, the performance of two professional football teams on any given Sunday. One team wins; the other looses. Quite often at a later date the role of winner and looser is reversed. If we ask why, the answer is quite obvious. Both teams are equally matched on ability, but motivation, i.e. "being up" for this game, varies from one Sunday to the next. Therefore, the team that wins is the team that is motivated or "up" for the game.

By analogy the same reasoning can be extended to the community college student. Those whose performance is measured by high GPA and retention rate are those who are motivated.

Among the most poorly motivated students at the community college are those who are low income/minority. Yet, this is no reason to assume that these students cannot be helped in overall performance through increasing their motivation. The purpose of this study is to test empirically whether or not the application of Nightingale Conant attitude change packages to an experimental group of low income minority students will help to increase their overall performance as measured by Fall semester increase in GPA and retention rates as compared to a comparable control group.

HYPOTHESES

Given the rationale outlined above, this study will test each of the following hypotheses:

1. The GPA of the experimental group (those given the Nightingale Conant attitude change packages) will be significantly higher ($P \leq .05$) as compared to a comparable control group.

1. Paul P. Preising and Robert Frost, Increasing Student Retention Through Application of Attitude Change Packages, paper delivered to California Association for Institutional Research, May, 1972.

2. The rate of college retention of the experimental group (those given the Nightingale Conant attitude change packages) will be significantly higher ($P \leq .05$) as compared to a comparable control group.

METHODOLOGY

Population and Sampling

The population for this study included ninety-two (92) low income minority students who enrolled in Fall 1972 at San Jose City College and were awarded California Extended Opportunity Program grants in aid on the basis of low income and high need for additional educational services. From this population of students, thirty (30) were selected at random, and at random thirty (30) were assigned to an experimental group. (Since the total number of students was so small, it was subsequently decided to use all of the students not in the experimental group as the control group (sixty-two (62) control group students)).

At the end of the Fall semester, six students selected to participate in the experiment refused to participate in the experiment; hence, the experimental group dropped to twenty four (24). Of the remaining students in the control group, there were thirteen (13) whose records were either lost, misplaced, or unable to be located. Hence, the control group at the end of the semester was dropped to fifty-five (55). Consequently, the tests of the hypotheses of this study were conducted on the basis of twenty-four (24) students in the experimental groups and fifty-five (55) in the control group.

EXPERIMENTAL TREATMENT AND PROCEDURES

Initially the attempt was made to assign each student one complete Nightingale Conant attitude change package and insure he listened to each of the tapes once each day devoting one week for each tape. Thus, for example, the student would listen to tape one once on Monday, Tuesday, Wednesday, Thursday, and Friday. Then he would listen for the second week of the experiment to tape two and so on until having listened to all of the tapes.

This procedure quickly broke down because of the lack of opportunity to supervise whether or not students actually listened to the tape and how frequently. As an alternative the tapes were collected and then issued out along with a cassette player by student supervisors who checked the tapes in and out and recorded the effort expended by the students in the experimental group who listened to the tapes. Little if any effort was made to meet with students and discuss the ideas presented in the tapes.

Meanwhile, the control group was advised they were in an experiment and were given some random counseling as a placebo. Thus, the chief difference between the experimental group and control group was that the experimental group listened to the tapes while the control group did not.

FINDINGS

The results of this study confirmed the hypotheses that the GPA and retention rates of low income minority students who received the Nightingale Conant attitude change package would be higher as compared to comparable control group. (See Tables I and II for additional details.)

*TABLE I

t - Test for Significance of a Difference Between the GPA Means of Experimental and Control Groups of Independent Samples of Unequal Size

DATA:

Experimental - GPA $\bar{X} = 2.02$, $n_E = 24$, $SD_E =$ $Ex_E^2 = 38.42$

Control = GPA $\bar{Y} = 1.07$, $n_C = 55$, $SD_C =$ $Ex_C^2 = 101.70$

FORMULA:

$$S_{(\bar{X}_E - \bar{Y}_C)} = \sqrt{S^2 \left(\frac{n_1 + n_2}{n_1 \times n_2}\right)} = \left(\frac{1.82}{1}\right)\left(\frac{24+55}{1320}\right) = .33$$

$$S^2 = \left(\frac{Ex_E^2 + Ex_C^2}{n_E + n_C - 2}\right) = \frac{38.42 + 101.70}{24 + 55 - 2} = 1.8197$$

$$t = \frac{\bar{X}_E - \bar{Y}_C}{S_{(\bar{X}_E - \bar{Y}_C)}} = \frac{2.02 - 1.07}{.33} = \frac{.95}{.33} = 2.88$$

t with 77 df is significant at $p < .005$

*Statistics calculated according to G. Milton Smith, A Simplified Guide to Statistics for Psychology and Education, Holt Rinehard and Winston, Inc., 1970, page 82.

*TABLE II

Chi Square Test of Independence Between
Retention Rates of Experimental and Control Groups

	Experimental	Control	
Remained in Class	20	24	44
Dropped	4	31	35
	24	55	79

Chi Square = $\frac{n\,(ad-bc)^2}{(a+b)\,(c+d)\,(a+c)\,(b+d)}$

Chi Square = $\frac{79\,(20\times31-24\times4)^2}{(44)\,(35)\,(24)\,(55)} = 10.67$

Chi Square = 10.67, d.f = 1, $P < .01$

*For calculations of Chi Square test of Independence see, G. Milton Smith, op.cit., page 193.

DISCUSSION

The results of the study quite dramatically support the effectiveness of the Nightingale Conant attitude change packages. However, it should be noted that tight controls of the experimental treatment were not always possible to enforce. For example, some of the experimental groups listened faithfully, whereas, others listened erratically. This raises the issue of how much was their performance a matter of the Nightingale Conant tapes, on the one hand, or self selection on the other. It should be recalled that six (6) of the experimental groups refused to participate in the experiment. Their common complaint was they did not have time to do so. Hence, very possibly six of the weakest participants may have been excluded from the study. Nevertheless, however, even if all six of these students had dropped out of college, the retention rate of the experimental group still would have compared favorably to that of the control group.

Further, it was noted some low income minority students are so totally unmotivated that they operate somewhat like to horse who not only refuses to drink, but will not even go over to the water. Said another way, if the patient refuses the innoculation, there is no way the medicine in the innoculation can help him. Thus, one of the problems identified is how do you deal with the zero motivated student? Related to this was a second observation; namely, the student who benefited from the tapes was one who was already somewhat motivated. Hence, one idea for listening is to motivate the motivated student and then get them to work with the zero motivated student as a peer counselor and/or tutor.

RECOMMENDATIONS FOR IMPROVED TESTING

The difficulities experienced in this pilot test suggest the following recommendations:

1. Students in the experimental group should be required to listen to the tapes as set out in the experiment as part of their responsibility for being granted an award of financial aid.

2. One way to get the zero motivated student to benefit from the tapes is to first of all motivate his peer counselors and tutors by using the Nightingale Conant tapes to motivate the motivators, and then hope their motivation will have a "spill over" effect on the zero motivated student.

3. A field test of the Nightingale Conant attitude change packages should be conducted at selected pacesetter community colleges within the state of California. This testing should capitalize on the experience of this pilot study to avoid errors and insure utmost rigor. The results of such a field test should then be shared widely. If these results are positive,the use of the Nightingale Conant attitude change packages or similar materials should at best be required to be included as components of low income minority programs or at least strongly recommended as such by those responsible for allocating such funds.

CONCLUSION

This pilot study revealed some difficulties of using attitude change packages to motivate low income minority students. Nevertheless, the results of the study suggest the Nightingale Conant attitude change packages can be of considerable help in increasing the grade point averages and retention rates of low income minority students.

The experiment did not identify any serious reason for not continuing to experiment and test commercial attitude change packages such as those of Nightingale Conant in educational settings. From a researcher's point of view, experimentation by using attitude change packages is both feasible and practical. The heuristic value of such experimentation as well as its significance for improving learning is definitely high.

UNIVERSITY OF CALIF.
LOS ANGELES

DEC 20 1974

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION